N Scale

JANUARY/FEBRUARY 2023

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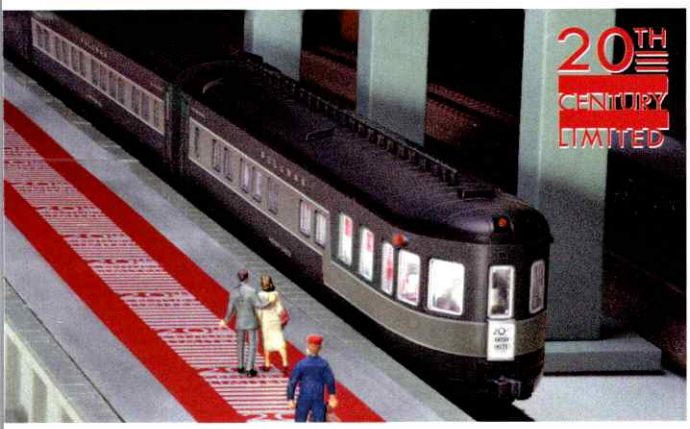
PRECISION RAILROAD MODELS

Classic Named Trains

N Scale



The New York Central 20th "Century Limited" from Kato USA is the premier Eastern Named Train available in N scale. The model depicts the train as it appeared in 1948 - one of its most iconic looks with then all-new cars pulled by sleek new E7 locomotives.

The Kato N Scale New York Central "20th Century Limited" is a must-have for any fans of classic passenger equipment or East coast trains, and is available in a 9 and a 4-car set for any size of layout!

Item #	Description	MSRP
#106-100	N New York Central 20th Century Limited 9-Car Set	$315
#106-7130	N New York Central 20th Century Limited 4-Car Add-On Set	$140
#106-0440	N EMD E7A NYC 2-Locomotive Set #4008 & #4022	$230

The Milwaukee Road "Olympian Hiawatha" from Kato USA represents this Chicago - Pacific Northwest train as it operated after 1952, with the addition of the iconic Full length Super Dome cars and tail end Observation car. This iconic N Scale named train can be pulled by a set of three FP7+F7 engines, with two different sets of numbers available. A gorgeous train that is a perfect addition to any modeler's collection!

Item #	Description	MSRP
#106-082	N Milwaukee Road Olympian Hiawatha 9-Car Set	$280
#106-0430	N EMD FP7A+F7B MWR 2-Locomotive Set #95A & #95B	$190
#106-0431	N EMD FP7A+F7B MWR 2-Locomotive Set #90A & #90B	$210
#176-2301	N EMD FP7A Milwaukee Road Locomotive #95C	$110
#176-2302	N EMD FP7A Milwaukee Road Locomotive #90C	$120

The Chicago & North Western "400" advertised "400 miles in 400 minutes" - a day trip in luxury and speed between the Chicago and the twin cities of Minneapolis & Saint Paul. The Kato "400" set is designed to capture the essence of that train in a space friendly 6 piece set with a single E8A locomotives and 5 Pullman Bi-Level cars of various types.

Packaged in an elegant and beautiful Bookcase style box, the C&NW "400" is perfect for the modeler who likes to bring their trains to the local club or operates on a limited amount of space in their main line!

Item #	Description	MSRP
#106-104	N EMD E8 and Pullman Bi-Level "400" 6-Unit Set	$260

The "City of Los Angeles" - one of the biggest names in Union Pacific streamliners - available from Kato USA in N scale as an 11-car set that is a brand new release for 2022 with all-new car names. Decked out with 3 dome cars as it appeared in 1954, the City of Los Angeles is one of the personifications of the golden age of railroading, and is a dream come true for any fans of the Union Pacific or of classic 1940's-50's era named trains!

Item #	Description	MSRP
#106-088	N Union Pacific City of Los Angeles 11-Car Set	$290
#176-5323	N EMD E9A Union Pacific #947	$110
#176-5324	N EMD E9A Union Pacific #949	$110
#176-5356	N EMD E8B Union Pacific #947B	$100
#176-5357	N EMD E8B Union Pacific #949B	$100

Kato U.S.A., Inc. 100 Remington Road Schaumburg, IL 60173 847-781-9500 www.katousa.com

1:160 scale

JACKSONVILLE TERMINAL COMPANY

Model Trains

NEW – 20' North American Container Chassis.

We have listed some data to help you with estimated time-frames/era of use. This will also assist if you want to do any weathering of the units. Of course, Rule #1 - It's your model RR, so Have Funn ... 20' chassis are normally 23.5' in length w/o the slider extended.

122001 3-Pack YANG MING LINES

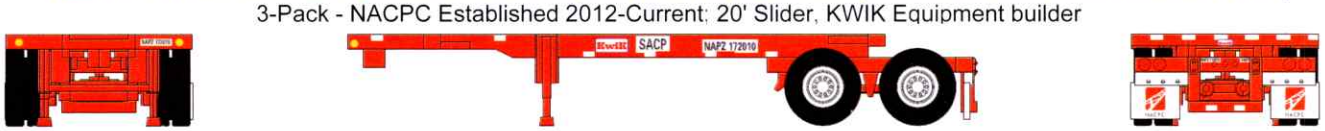
Round Landing gear Feet. Source Photo 1988

122002 3-Pack CHINA SHIPPING

Source Photo 2009 - 20' Slider

122003 North American Chassis Pool Cooperative NAPZ SACP (South Atlantic Consolidated Pool)

3-Pack - NACPC Established 2012-Current; 20' Slider, KWIK Equipment builder



122004 3-Pack MAERSK SEALAND - 1999-current

Sealand Repaint, Round Landing gear feet - 20' Slider

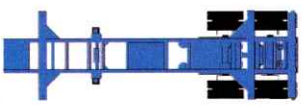
122005 3-Pack TRANSAMERICA ICS - METRO CHASSIS POOL

Early era, Round Landing gear feet Late 1970s-early 2000s

122006 3-Pack FLEXIVAN - 2017- current - 20' Slider

20' Chassis Model Features Include:

Positional wheel bogey (per modelers desire) # Landing gear in up and down positions
#10 lug wheel hubs #Detailed printed mud flaps # Goose-neck frame design
Air system simulated on wheel bogeys # Decoration based on prototype photos
22+ hand assembled connection points # Metal plates for magnetic connection
Two, wheel Bogey styles; standard, and extended.



N SCALE 20' CHASSIS – RTR THREE PACKS - MSRP $54.95

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14+

Volume 35 Number 1
January/February 2023

N-Scale

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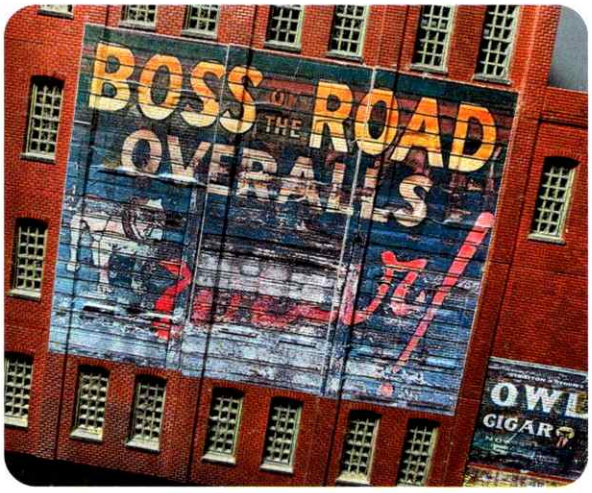

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Want to know more? Wonder what's coming up? Visit us at: www.nscalemagazine.com or contact us at: info@nscalemagazine.com

JACKSONVILLE TERMINAL COMPANY

Model Trains

1:160 scale

40' North American style container Chassis. 40' container chassis in stock, ask you dealer to show you these detailed models in assorted Schemes.

Designed to be 'PIN' and Magnet Compatible with all TEN Types of JTC 40' container models.

This newly tooled model features pin holes and metal plates to accept the JTC magnetic connection system. Batch 2 releases are in Jewel Box packs of TWO chassis.

JTC 142009 MATSON (early), 40' black container Chassis 2-Pack, NO stripes

JTC 142014 YANG MING; 40' orange container Chassis 2-Pack With conspicuity stripes

JTC 142015 HYUNDAI,40' red container Chassis 2-Pack With conspicuity stripes

JTC 142017 FLEXI-VAN; 40' gray container Chassis 2-Pack With conspicuity stripes

JTC 142018 APL (BLUE); 40' blue ontainer Chassis 2-Pack With conspicuity stripes

JTC 142027 TMX Intermodal; 40' gr/org container Chassis 2-Pack With conspicuity stripes

Based on a North American style prototype; Features include:

- Goose-neck frame design
- 10 lug wheel hubs, mud flaps
- Landing gear in up and down positions
- Air system simulated on wheel bogeys
- Decoration based on prototype photos
- 22+ hand assembled connection points

40' CHASSIS - TWO PACKS - MSRP $41.95

14+

EDITORIAL

Happy Holidays from all of us at *N-Scale Magazine*. Wishing you a Merry Christmas and Happy New Year. We have been so blessed by all of your support. We are looking forward to next year and all it has to offer in the way of new layouts, new products and more.

Let 2023 be the year you begin that new layout you've been dreaming of. Follow the new series by Dan Lewis, beginning in this issue on page 14, Along the Lines, aimed at providing the modeler with an approach to N scale operations. Dan has so much to share and we can all learn from him.

I hope you will share your love of model railroading with your family and friends; enter a gift subscription and spread the fun. Gift subscriptions will begin with the January/February 2023 issue. Cheers to a new year and new beginnings. Thank you for your continued support.

Pamela Clapp

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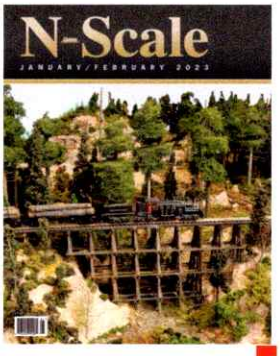

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CENTRALIA CAR SHOP'S
N Scale

AVAILABLE SOON
SUPERDOME PASSENGER CARS

In the early 1950's, Pullman developed a new "full-length" dome design for the Milwaukee Road. It featured an 80-foot long dome level seating 68, almost triple that of the Vista Dome. Unlike Vista Dome seats, these seats reclined a bit. Ten of these new "Super Domes" arrived on Milwakee Road property in late 1952 from Pullman. Chosen via an employee naming contest, B.H. Perlick won by suggesting the name "Super Domes". Rejected suggestions included "Master Dome", "Ultra Dome", and "Panorama Dome".

In 1964, the Canadian National purchased six Super Domes from the Milwaukee Road. The CN called them "Sceneramic" cars and placed them in service on the Super Continental. VIA Rail inherited all six and used them into the early 1980s. They were then sold off to private owners. Amtrak leased, and then bought, the Milwaukee Road's four remaining Super Domes. The cars were on many routes including the San Francisco Zephyr and Coast Starlight. Amtrak sold all four in the late 1970s. They acquired three cars from Tour Alaska in 1990 and operated them through 1995. The North Carolina Department of Transportation (NCDOT) acquired former No. 53 in 1996 and used it on the Piedmont before selling it in 2005.

The N Scale Super Dome is a great addition to any 1950's-1960's era passenger train consist. There's no need to replace any other "dome" cars you may have....as the Milwaukee Road intended! The model features a detailed interior, battery powered LED lighting, metal wheelsets, and Micro-Trains compatible couplers. Be the first to pick up these super cars from your favorite hobby dealer!

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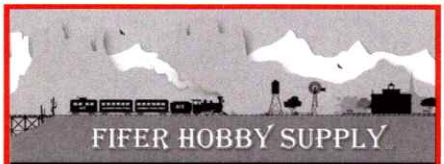

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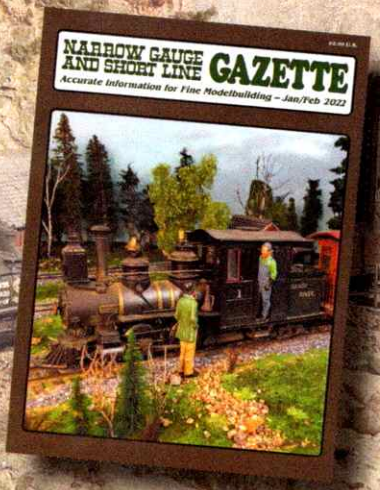

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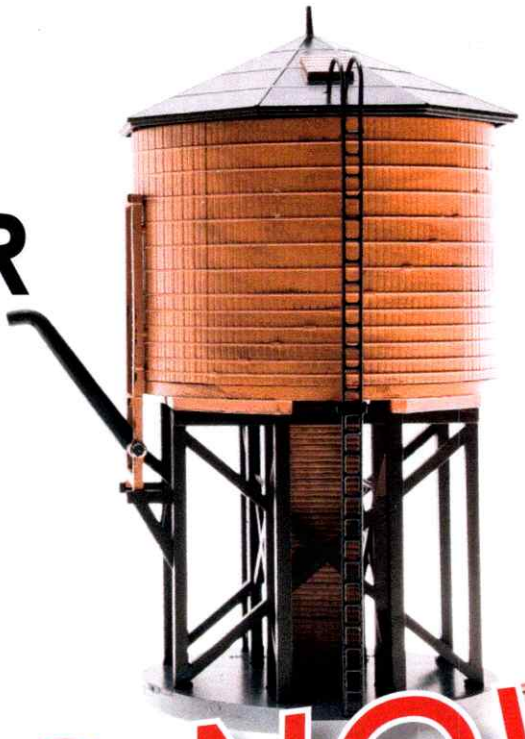

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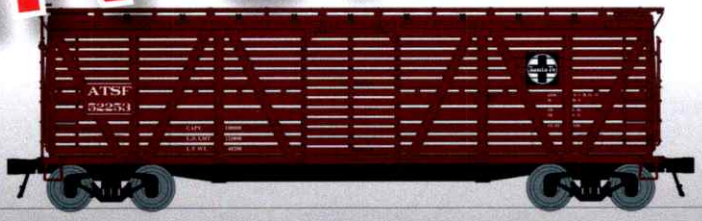

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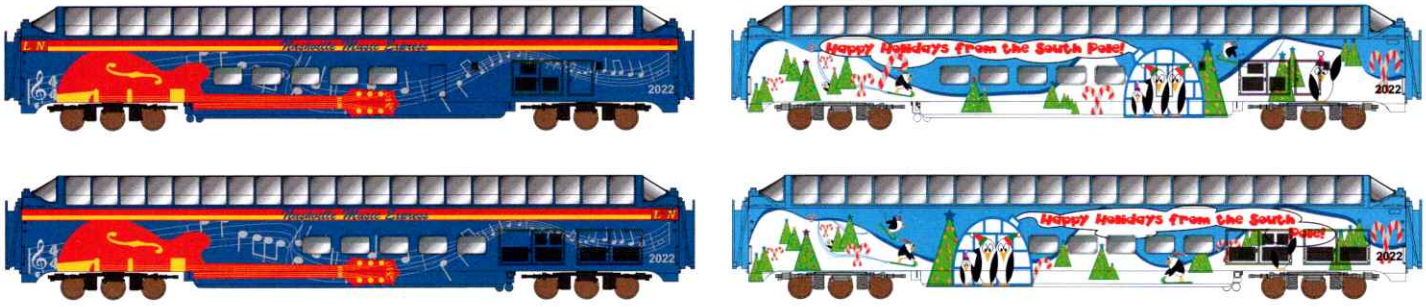

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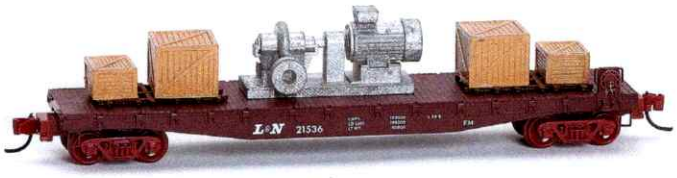
Nashville Music Express Road # 2022 Item # NSE 22-133 | Penguin Surprise Road # 2022 Item # NSE 22-134
Price: $64.50 (each car +S&H), $119.00 (both cars +S&H)

N Scale Enthusiast – RJ Corman "Crane Train" Flat Car with Crane Component Loads
RJ Corman Road #s RJCM 16420, 16398, 16124 & 16507 Price: $288.50 (4 car set w/ loads, +S&H)

N Scale Enthusiast –
Louisville & Nashville Flat Car with Union Carbide F-100 Trucks
L&N Road # L&N21574 Item #NSE 22-99 Price: $52.50 (+S&H)

N Scale Enthusiast –
Louisville & Nashville Flat Car with Sterling Red Compressor
L&N Road # L&N21489 Item #NSE 22-100 Price: $48.50 (+S&H)



N Scale Enthusiast –
Louisville & Nashville Flat Car with ASSA Silver Compressor
L&N Road # L&N21536 Item #NSE 22-101 Price: $42.50 (+S&H)

N Scale Enthusiast –
Louisville & Nashville Flat Car with GE Green Transformer
L&N Road # L&N21247 Item #NSE 22-102 Price: $54.50 (+S&H)

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Showcase

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CSX Transportation "Square Cab" Item # SXT38619 Price: $149.99 (DCC-Ready) $249.99 (Pre-Installed ESU LokSound DCC)

Scale Trains – Rivet Counter – EMD SD40-2
Union Pacific "Fast Forty" Item # SXT38607 (DCC & Sound) Price: $149.99 (DCC-Ready) $249.99 (Pre-Installed ESU LokSound DCC)

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Rivet Counter – GE DASH 9
Santa Fe "Warbonnet"
Item # SXT38511
Price: $144.99 (DCC-Ready)
$244.99 (Pre-Installed
ESU LokSound DCC)

Scale Trains –
Rivet Counter – GE DASH 9
Norfolk Southern "Top Hat"
(Horsehead Scheme)
Item # SXT38525
Price: $144.99 (DCC-Ready)
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ESU LokSound DCC)

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NEW PRODUCTS

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ONE 40' High-Cube Reefer Pack
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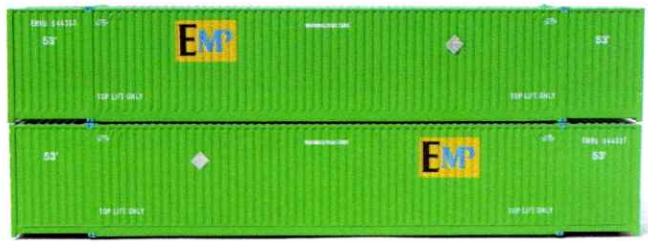
EMP ('Centered Logo', Set #4) Item #JTC-537099 Price: $33.95 (2 pack)



Jacksonville Terminal Co. – 53' High Cube 8-55-8 Containers
EMP (Set #3) Item #JTC-537049 Price: $33.95 (2 pack)

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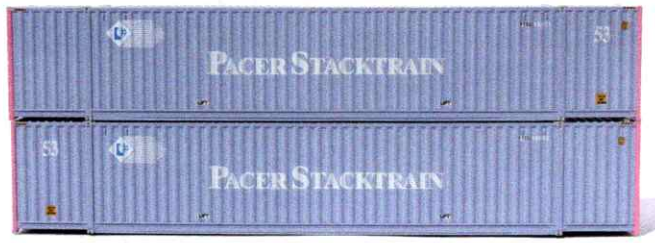

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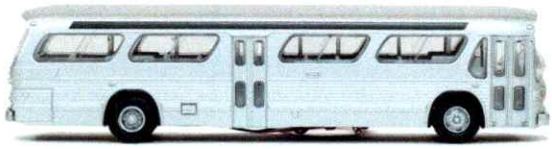
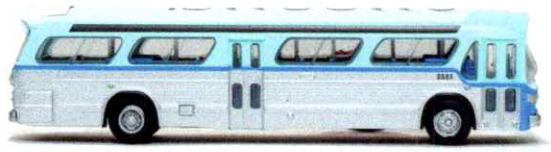


Rapido Trains, Inc. – New Look Bus
Generic Silver Item #573099 Price: $34.95 USD



Rapido Trains, Inc. – New Look Bus
Santa Monica Item #573008 Price: $34.95 USD

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Jacksonville Terminal Co. –
APL 40' High-Cube Reefer Set
APL Reefer Containers &
Thermo King Gensets (6 of each)
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ALONG THE LINE SERIES

Part 1: Track Configuration

by **Dan Lewis, MMR**

Photo 1: GP9 231 was one of several that appeared on the North Montana Line of the MILW in the 1950s. This "Along the Line" series will take us through a variety of theories, perspectives, approaches, and techniques that I've acquired over the past half century of model railroading. You may not always agree with me, and that is to be expected, but you may benefit from looking over my shoulder just the same.

Mark Twain was no model railroader by a long sea mile, but given what he said about decisions and experience, he might well have been. "Good judgement is the result of experience and experience the result of bad judgement." After nearly half a century of model railroading, I've lived up to that maxim. I've certainly made my share of less than stellar decisions. Hence, this series called "Along the Line" is a distillation of the interplay between bad decisions, experience gained, and better decisions. In the series, we'll cover a variety of subjects, including track configuration, switching, tools and techniques, freight and passenger trains, yards, and maintenance. The goal is to offer some helpful advice that will minimize the bad decisions and maximize the good ones. I hope you will come along for the ride (pun intended).

In this first installment, I want to discuss track configuration—not so much the nuts and bolts of soldering and wiring, but rather, the art of producing sound track arrangements that draw from prototype practices, but also, that make for an interesting and practical appearance for a model railroad layout. I realize, of course, that the idea of "art" is inherently laden with diversity of opinion, so if I cross yours, I offer my apologies in advance.

Track Angles

The goal of trackage for the prototype railroad differs from the goal of

Photo 2: Train 117, under slow orders through Judith Gap, eases by a track gang. Here, you can see the curvature of the tracks, which makes for a more interesting visual appearance than simply straight tracks. By creating a bulge in the modeled hillside, the track curvature was given plausibility. Generally, railroad tracks are not laid in curves unless there is a reason, but by thoughtful modeling, you can create the reason.

Photo 3: This view of one section of my layout shows the angles that separates the vista into four separate scenes. Of course, these angles must also accommodate the track plan for the other side of the wall, which features open staging. Had I built a simple straight wall, I would have forfeited the natural advantage of the scene divisions. One can create different scenes on a straight wall, of course, but it is more of a challenge.

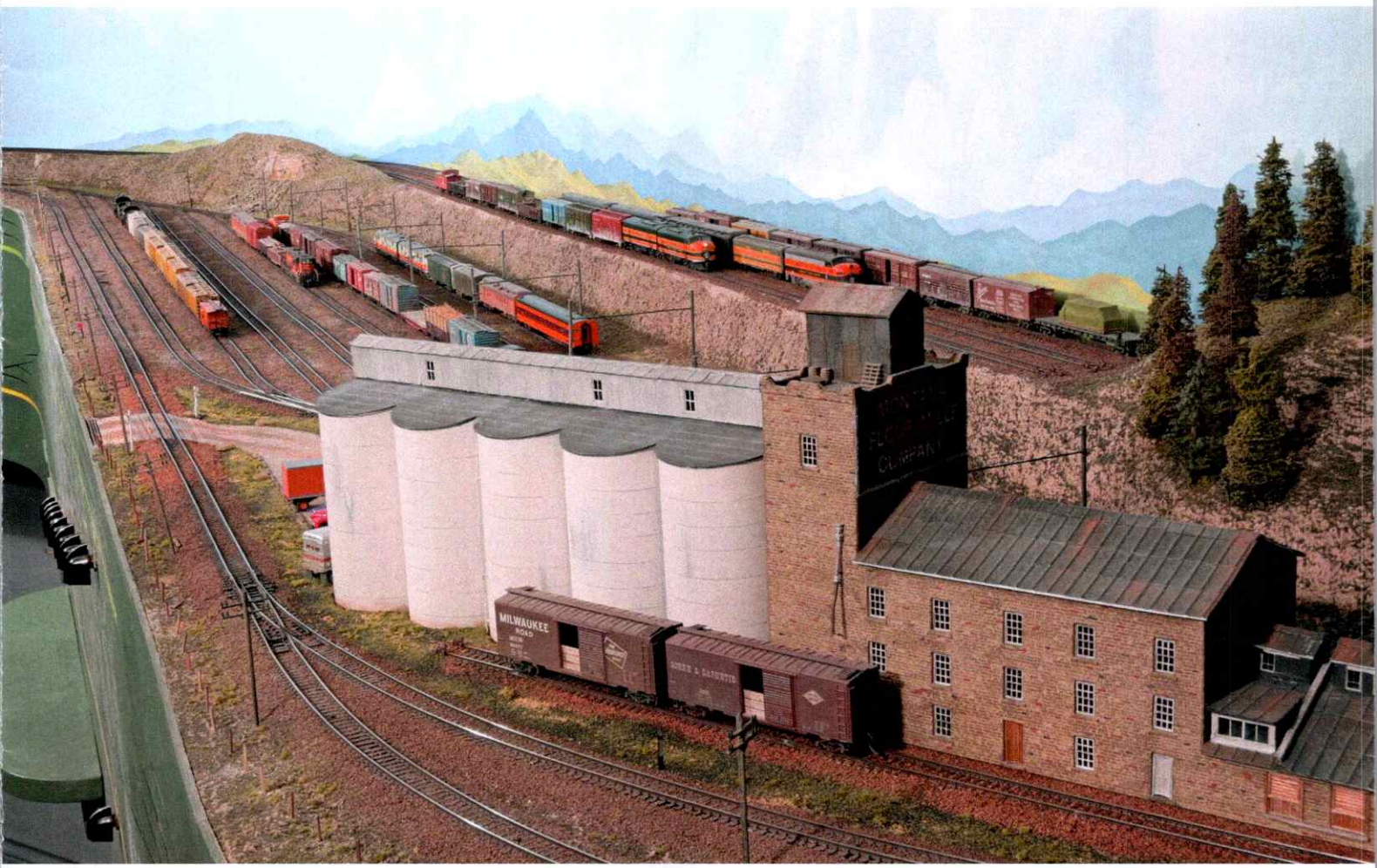


Photo 4: In the foreground is one of the industries near the end of the peninsula. Stretched out behind the flour mill is the open staging yard, which has 11 staging tracks plus a by-pass track. The three staging tracks on the upper-level handle Great Northern trains, and the eight staging tracks on the lower level handle Milwaukee trains. Scenicing the open staging enables it to blend harmoniously with the rest of the layout.

the layout builder. Prototype railroads are generally looking for the straightest and flattest route in order to transport goods as quickly and efficiently as possible from one place to another. They are hardly concerned with aesthetics, at least in the way model railroaders think of things. In a word, the straightest and flattest route is a true benefit to the railroad, but visually boring to the layout builder. Model railroaders want to create a layout that not only mimics transportation concerns, but also works toward visual, artistic, and photographic concerns, things that are not so prominent for prototype railroads. As such, it is important for the model railroader to create track angles that are not always strictly parallel with the layout edge and that are not always straight. This may not always be possible, of course, and like most layouts, my layout has straight trackage paralleling the front edge, too. However, angled trackage and curvatures are inherently more interesting than the dull straight lines of the prototype. There will be places in a model railroad where it is possible to depart from the straight and boring to the angled and interesting, and you should look for those opportunities (***Photo 2***). On model railroads, we have a much greater need for variety rather than sameness in the interests of aesthetics. Of course, some of this variety and interest will naturally be the result of good modeling of structures and the railroad equipment itself, but be sure not to neglect the underlying importance of track angles and curves.

Linear but Not Straight

Several decades ago, when I first became a participant in our hobby, the typical model railroad track plan was designed for stand-alone benchwork in the middle of the layout space. That approach has changed over the years, and today the typical track plan is designed for around the walls benchwork. The basic goal today is to avoid having a train run through the same scene more than once on a given route. Hence, the "pure" track plan generally features less track, more supporting scenery, and a linear design. This evolution of track planning has been positive, both with respect to prototype fidelity (prototype railroads did not usually double back on themselves) and layout attractiveness. However, linear doesn't have to mean straight, and one of the best things I did when planning my current layout was to create a wall to divide the layout room, a wall that was not straight. It started out at right angles from the basement wall, then changed angles for several feet, and finally angled back again. The wall ended in what amounted to a large peninsula, where trains would circle the peninsula and disappear out of

Photo 5: The west end of Falls Yard contains the locomotive servicing area with a machine shop at the bottom left (see *N-Scale* May/Jun 2021), an engine house, a water plug, and a coaling tower. Winnett, on the upper level, features a coaling tower and water tank, a station, and the village itself. For the various store fronts in Winnett, see my article in *Railroad Model Craftsman* (August 2020).

sight behind a bluff as they progressed toward the other side of the wall.

In looking at this wall (***Photo 3***), you can see how it is linear, but not straight. At the far end, where the seven span girder bridge simulates the prototype near Judith Gap, Montana, the wall starts out at right angles to the end wall of the basement. Where you see the tall conifers behind the red-faced brick structure, the wall is following an angle (this is the scene shown in ***Photo 2***). It then turns back again to enter the city of Harlowton. The double-headed SD7s are leaving Harlowton on a curvature simulating what on the prototype was called "The Big Jim Track" and beginning to circle the large peninsula. Eventually, the train will disappear behind a bluff, the one shown in the lead-in photo.

This linear approach to track planning much more nearly replicates the type of railroading that one sees in real life, but the angles and curves make for a more interesting layout. Further, the angled wall makes this section of the railroad seem longer than it really is as trains pass from one scene to the next. The illusion of length in model railroads is to be measured not in feet, but rather, in the sequence of scenes. Moving from front to back, there is the scene immediately in the foreground, a second scene for Harlowton, a third scene which angles through a wooded hillside, and the final scene where the line passes beneath the deck girder bridge (for a full track plan, see *Model Railroader* magazine, September 2011, pg. 48).

Open Staging

Years ago, architect David Barrow wrote a number of articles in the model railroad press advancing the "domino concept" of bench work, which is to say, box girders joined together to form the layout base. In these articles, he convinced me that open staging was a good option. I was pretty sure that I did not want to construct staging beneath the layout, and I didn't have the space for a dedicated staging area. Hence, I opted for open staging that Barrows recommended, using a through-yard design, but scenicing it so that it blended with the rest of the railroad (***Photo 4***). This staging is on the opposite side of the angled wall just described, and it serves as both ends of the track plan. Even though the layout

Photo 6: The nearest track is a stub-ended siding that serves a grain elevator out of sight to the left. The middle track is the mainline. The farthest track is the passing siding that also serves the Denton station, and it has turnouts at both ends, connecting it to the mainline. Behind the station is an elevated branch line that goes to Winnett.

Photo 7: The nearest two tracks are the mainline and the siding, and out of sight to the right is also a station. The farthest track with the boxcar, stock car, and tankers is a stub-ended spur. This community is often served by a mixed train carrying both freight and passengers as indicated on the Timetable.

Photo 8: Superelevated track, while entirely cosmetic on a model railroad, still gives the impression of "leaning" into the track curve. With the track ballasted, the white styrene risers underneath the outside rail of the curve remain hidden.

is, more or less, a huge loop, it operates point-to-point. What I call the East-West Mainline staging simulates traffic on the MILW's mainline between Chicago and Tacoma, some of which heads northward on the North Montana Line, the branch that I model.

Scheduled trains depart staging or return to staging by passing around the peninsula, but there are spurs near the end of the peninsula that serve two industries, adding interest and additional operating potential, the Montana Flour Mill, replicating the real one on the south side of Harlowton (see my article in *N-Scale*, Jan/Feb and Mar/Apr 2019), and the Tuckey Stock Corral.

The same yard, however, also simulates the far northern end of the North Montana branch that runs northwesterly from Great Falls and terminates at Agawam. Both "ends" of my model railroad are served by this single staging area.

Curved Yards

In researching the prototype, I discovered a good example of a curved yard on the MILW at Avery, Idaho. I do not model Avery on the MILW mainline, but the intrigue of a curved yard captured my imagination, and I could see immediately its potential for adding visual interest. Hence, I decided to construct Falls Yard around a broad curve. I also planned for an upper level behind Falls Yard to simulate the small town of Winnett, the end of an additional branch line out of Lewistown (***Photo 5***). Years ago, John Allen's articles convinced me that modeling two towns together, but on different levels, provided enough separation to operate them as individual communities, while retaining the advantage of a deeper and broader vista. A curved yard takes more space, of course, but I situated it just opposite the angled wall described earlier, so that the inward angle of the wall matches the bulge necessary for the curved yard. The aisle between them remains a generous four-feet wide. This width is important, since the staging yard and Falls Yard are directly across the aisle from each other, and more butt-to-butt space is needed for operators.

As you can see in the photo, Falls Yard curves around at the very left, while the community of Winnett, in the upper center, lies at a higher elevation. The downside of these two operating areas in the same space is that the aisle can get congested, even with the

Photo 9: In this mockup, you can clearly see the styrene strip beneath the outside curve of the track. I've included a store front alongside to more clearly emphasize the effect of the superelevation. The styrene strip is .020 x .060. You can make the superelevation tilt either more or less depending upon the thickness of the styrene strip used.

generous four feet of width. This is because Falls Yard and Winnett are on the same side of the aisle, so the Falls Yardmaster and the Ops Crew serving Winnett have to negotiate the space!

When constructing yards, whether working yards or staging yards, you should consider spacing the yard tracks more widely than is prototypical. Typical spacing on the prototype is about 12'-15', track center to track center, but in N scale, if you intend to do any car placements by hand, you'll need to have wider spacing. If you look online under this subject, you'll find about as many opinions as people weighing in on it. Human fingers are not all the same size, so you'll need to do some experimenting and see what works best for you. I settled on 1½" for yards and 1¼" for sidings, track center to track center.

Sidings

Every railroad has sidings, but they are not all to the same purpose. A siding, by definition, is low-speed trackage usually running roughly parallel to the mainline. Sidings are used to store cars, serve industries, and allow trains to pass each other. A siding can be stub-ended, which is to say, it has only a single turnout branching off from the mainline, or it can be a through-siding with turnouts at both ends. In constructing a model railroad, the builder should carefully think through the operating functions of any siding he builds. If it is a passing siding, he needs to consider the length of the longest train he intends to run. If he limits his trains to 20 cars, for instance, his passing siding needs to hold that many cars plus an engine and caboose. (It is possible, of course, for a train longer than a siding to pass another train by using a saw-by maneuver, but in general you'll want to avoid this sort of complication if you can.) If the siding is for an industry, it can be long or short, depending on the industry itself.

At the small community of Denton, I have both a passing siding, as well as a stub-ending siding (***Photo 6***). The passing track siding also serves a station and, since the passing siding has turnouts at both ends, it can be used to allow an engine to run around a train. This latter maneuver is important in order to serve the stub-ended siding, since sometimes the engine needs to get behind a rail car in order to drop it off.

Also, at the left you'll see a water tank to serve steam locomotives. Steamers generally need to stop more often for water than for coal, depending on the size of their tenders, so you'll need more water supply than coal supply if you want to simulate the prototype. In this photo, it would be common practice to spot the passenger cars at the station platform, uncouple the engine, and fill its tender with water while the passengers are boarding or detraining. This avoids the passengers having to endure any back-and-forth movements of the locomotive.

The small community at Choteau (once made famous due to a western movie filmed there featuring a certain young actor named Ronald Reagan),

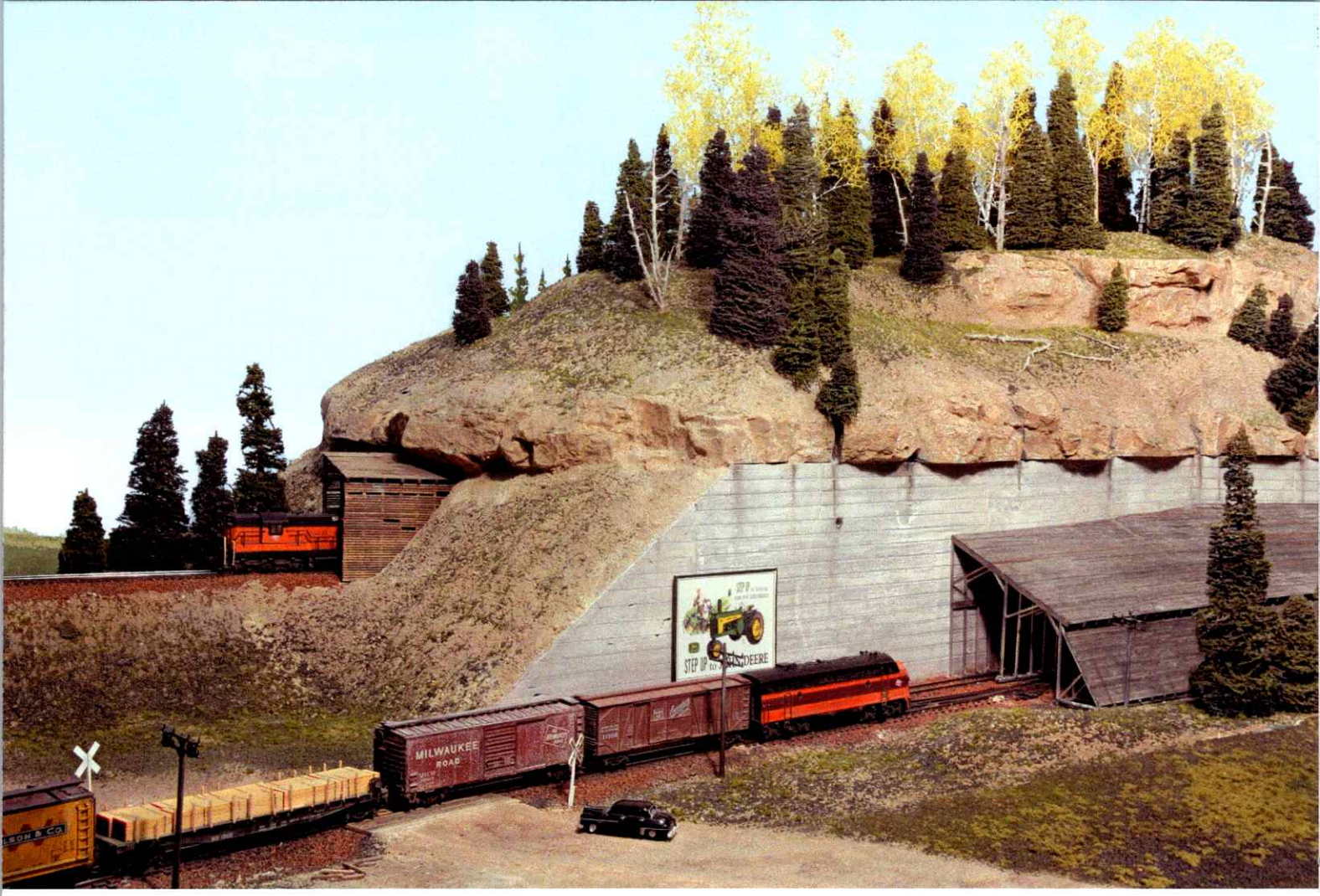


Photo 10: The visitor to the layout likely won't suspect that the top of this sceniced hill lifts up to access the hidden track of the upper-level branch line that runs through it. The horizontal seam runs along the top of the cement retaining wall, and the vertical seam is disguised with conifers.

features both a run-around track and a stub-ended spur (***Photo 7***). The stub track serves three industries, a grain elevator (out of sight to the right), a stock corral (center), and an oil loading facility (left). The small gas station receives LCL (less-than-carload) freight by having it dropped off at the grain elevator.

Mainline Curves and Superelevation

Prototype railroads elevate the outside rail on track curvatures in order to balance the centrifugal force exerted on the wheels due to the curve. This causes the railroad cars to be tilted slightly and enables a fast-moving train to negotiate the curve without overturning. You've probably noticed the same sort of thing when driving your car on curvy roads in the mountains or when riding a rollercoaster at an amusement park. While this engineering technique is necessary for real railroads, it is unnecessary for model railroads, which have neither the weight nor speed to require this engineering compensation. However, you may want to superelevate your track for cosmetic reasons if not functional ones. While superelevation will not make your models track any better, replicating this technique will enhance the look of your model railroad (***Photo 8***).

Superelevation is relatively easy to accomplish. When laying your track, you need only insert risers beneath the ties just under the outside rail of the curve. (I use Evergreen styrene strip .020" × .060" Item No. 123). After the track is ballasted, these styrene risers will be covered and invisible. The visual effect, however, is striking as you see your trains lean into the curve on the mainline (***Photo 9***).

Scenery Lift-outs

Hidden track may not be preferable, but in many cases, it is unavoidable. In my case, it was necessary for a branch line that, even though it was elevated, ran roughly parallel to my mainline for some 27'. To avoid the visual awkwardness of the two lines running beside each other, I elected to construct periodic sections of the branch-line beneath mountainous scenery, and as such, the trackage is hidden. Visually, the hidden trackage accomplished what I intended, and the hidden sections of the branch at a higher elevation (the one line 2½" higher than the other), had enough visual separation to avoid competing with the mainline.

If you do use hidden trackage, two "musts" should be observed. First, you should avoid turnouts in hidden areas: turnouts in hidden trackage are an invitation to trouble that you don't want. Second, make sure you can access all the hidden track for cleaning and maintenance. The latter I accomplished with scenery lift-outs, and the lift-out at Denton is a good example of what has worked well for me (***Photo 10***).

The immediate cosmetic challenge

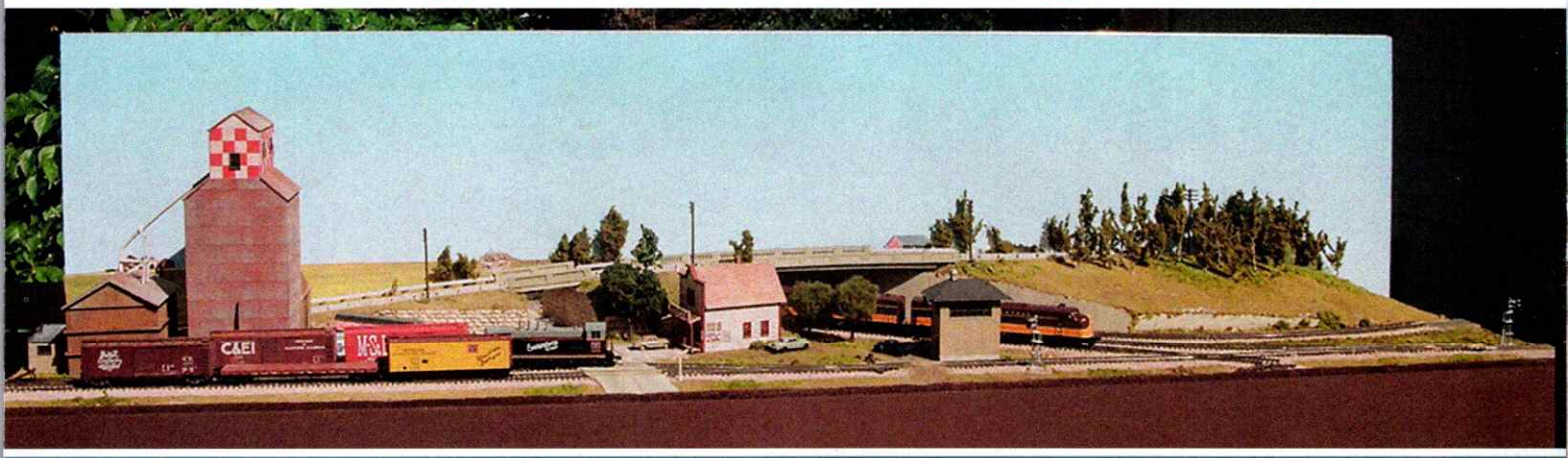
Photo 11: With the lift-out removed, you can see the layers of Styrofoam which form the sub-structure of the sceniced hill. At the right center, I've left one of the conifers lying on its side, which normally is placed upright in the vertical seam to hide it.

Photo 12: Grasping the two bamboo skewers, the lift-out is easily moveable. Unlike wooden dowels, which are made of pine or some other soft wood, bamboo is very tough, won't split or break, can be carved and painted, and weathers just fine.

of building a lift-out is to disguise the seam. In this lift-out, I situated the seam at the top of a cement retaining wall, and any other seams I camouflaged with trees. Be sure to color match the terrain of both the lift-out and the surrounding area so they blend well. Once the lift-out is removed, you have easy access to the hidden track (***Photo 11***). I created two bare tree trunks to serve as "handles" for lifting the removable section. I used long bamboo skewers so I could anchor them deep in the Styrofoam sub-structure using Loctite PL300 Foamboard adhesive (***Photo 12***). The skewers that extend upward above the sceniced ground surface, I tapered with a razor knife, then weathered them to make them look like bare tree trunks.

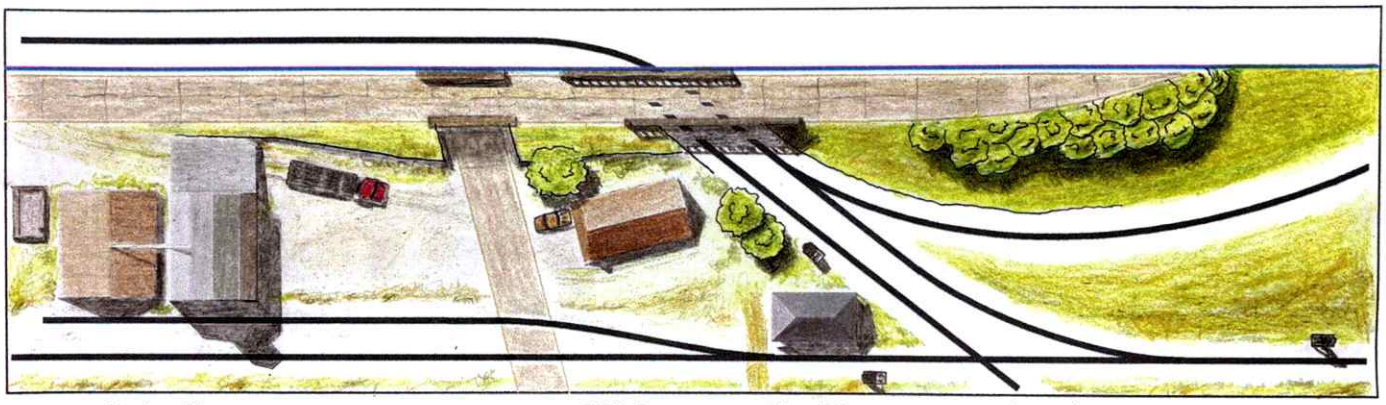
In the next installment of the *Along the Line* series, I will explore a completely different aspect of model railroading, the protocols for switching cars. Until then…

A SECOND SECTION



30 Years Later

by **Dave Lull**



In 1993, *N-Scale Magazine* published an article about a small layout I created. This 1' × 4' N scale industrial micro layout was made for switching and included staging/fiddle tracks and the ability to connect to others' similar layouts via a plain wooden bridge (there are no particular rules for tracks connecting at the edges, so I don't call it a "module"). I knew of three other modelers building such pieces, and one year, two of them connected with mine for a display at a local model train show. They ran together well, since mine and one other had staging tracks – we simply set up and broke down trains and ran them through the scenery between the staging areas, now and then doing some switching at various industries.

In 2019, I decided to build another section that would connect at one end of the previously built section. It would be for an annual NMRA show nearby in 2020, but Covid preempted the show that year, and the project was shelved. When I heard the 2022 show would be on, I dusted it off and continued.

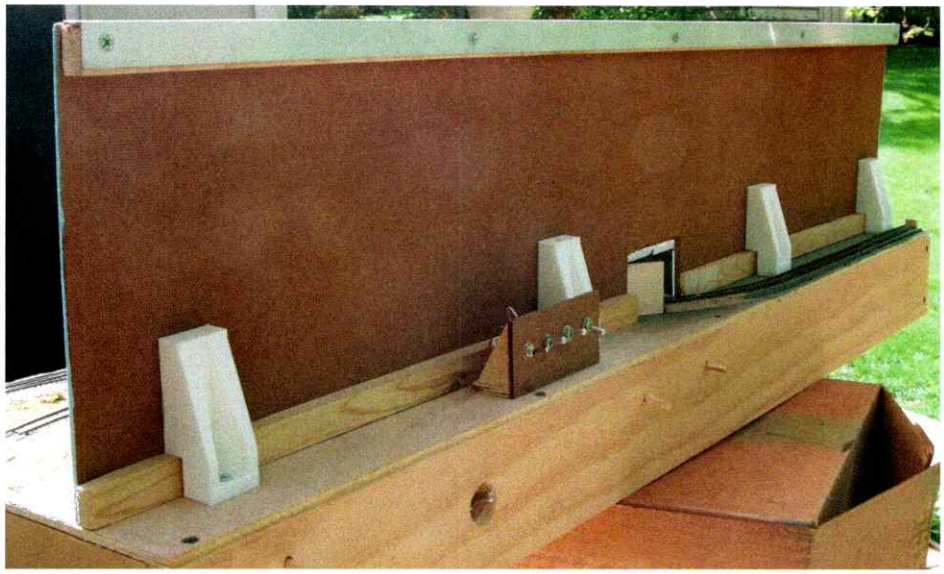
Design

I tend to model realistic scenes, which are based on real areas, but not necessarily of any specific place. I wanted this one to have a farmland theme with a grain elevator siding, plus a rear staging track and a dummy interchange. I decided to use whatever tools and materials necessary to create the rural scene I had in my head. I made some sketches, and finally settled on what you see here. The rear track meant some kind of transition through the backdrop, and I opted for a highway overpass to disguise the backdrop hole. I wanted to add a small country store, as well and a signal tower for the interchange. I chose to continue the road at height on the right end with a grove of trees to hide the transition into the backdrop.

Construction

I used 1×4s for the structure with a ¼" plywood top, as this section had to match the old one in height. The weight wasn't too bad since the whole section was so small (1 × 3½') and I had no plans to make more. The backdrop is Masonite, held on to the base with brackets I designed and 3D printed. I put a ½ × ¾ wood strip along the bottom and another at the top. The top edge is also reinforced with an aluminum angle, and both keep the backdrop flat and straight.

I painted the backdrop with blue and white acrylic, feathering darker upward. I found some appropriate farmland scenes online and printed them on legal size paper. These would be arranged and cut later. One includes a road that matches to the underpass road to give the illusion of it continuing into the distance. I carefully cut around the buildings and a few trees and coated them with a clear flat spray.

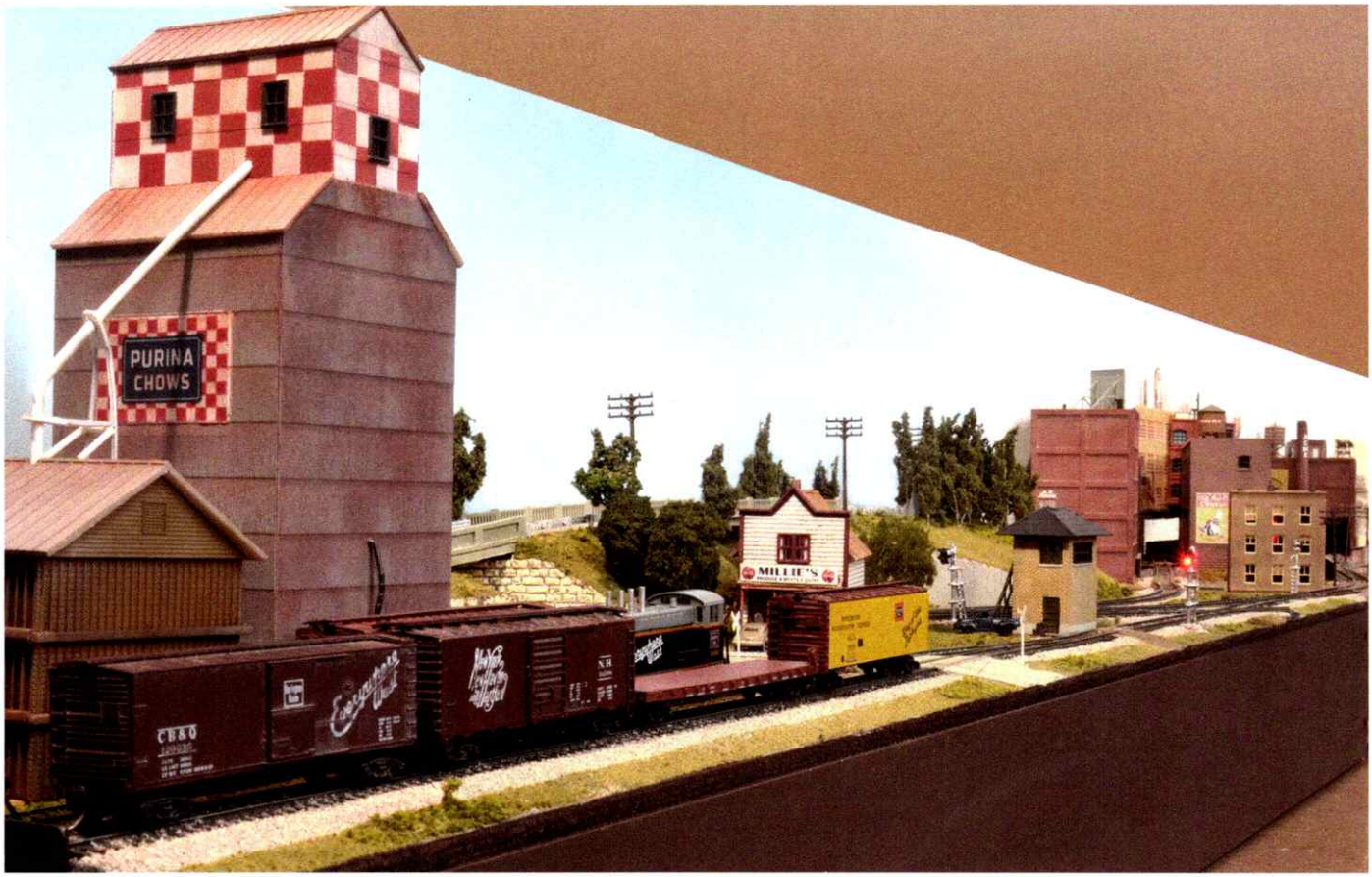


After the road was in, I lightly taped these up until I was happy with their height, then spray glued them on (I purposely left a little room behind the road to insert these). Afterward, I glued small trees in places where there were joints in the paper or any rips, etc. that needed covering.

Track

The track is code 55 from Micro Engineering. I set all but the elevator siding on cork roadbed. I 3D printed a roadbed transition piece for bringing the track level from the roadbed height down to the ground for the siding. The turnouts are controlled by choke rods (dowels) in the back connected to bat handle toggle switches, which in turn have a wire to the turnout throw bar through a hole in the plywood under the track. The track was mostly ballasted with fine gray ballast; the siding was covered with fine ground foam of earth and soil colors, with a little off-white pastel sprinkled under the grain spout to represent spillage.

The sections connect with thumbscrews put through holes in the section frame and made tight with wingnuts. The new and old sections' track work is connected with two 3-inch pieces of track that span the gap. The assembly is meant to sit on crates which in turn sit on tables to provide height for shows.



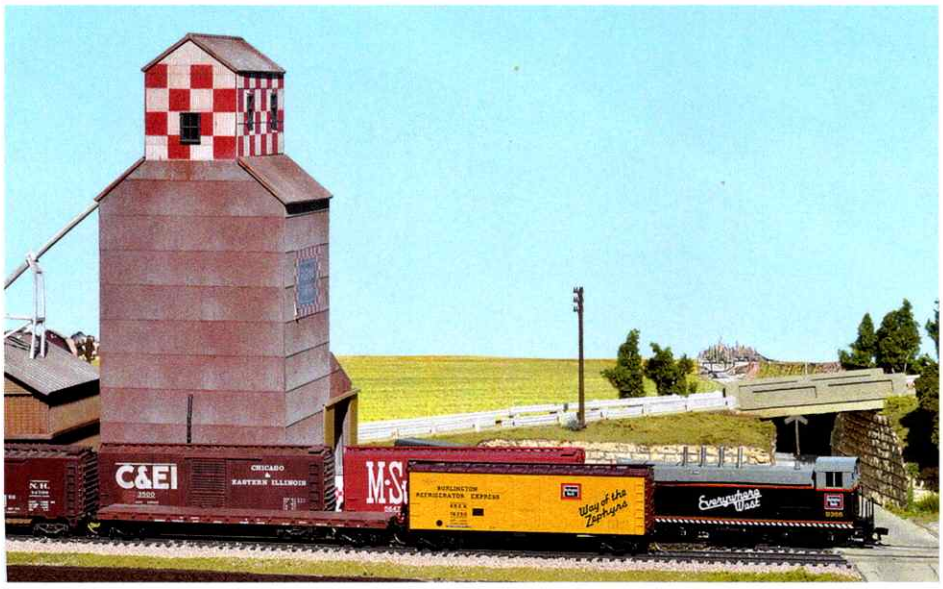
I provided posts in the crates for work lamps to light the layout.

The block signals are powered with three AA batteries. They are wired to a panel in the back that has a simple SPDT toggle switch for each and an on/off switch for the power.

Scenery

Foam was used to build the road ramp and the hill on the right. I used Masonite for the road, spackled thinly so cracks could be carved into it. I blended the hill and embankment using Sculptamold over the foam. I positioned the foam and road pieces a bit away from the backdrop as I mentioned before so I could set the backdrop pictures I would use into the gap. Next time I'll make the road and hills first as a loose assembly so the pictures can be glued on more easily. I glued the foam parts down with Loctite Powergrab cement, and surformed the foam to shape it.

Old concrete highways are a yellowish gray, so I used dark gray and yellow oxide mixed into Spackle, and then applied a thin layer to the Masonite road base. I scribed some fairly straight cracks in the surface, lengthwise down the middle of the entire road and across the road about every 40 feet. Then I added rough cracks in various directions. I painted the road with a mix of the gray and yellow which I kept in a container – this was so that any touch-up work done later would match the base color. I drew some tar lines using a Micron .005 black felt tip pen. I smudged the middle of the lanes with a medium gray pastel applied lightly

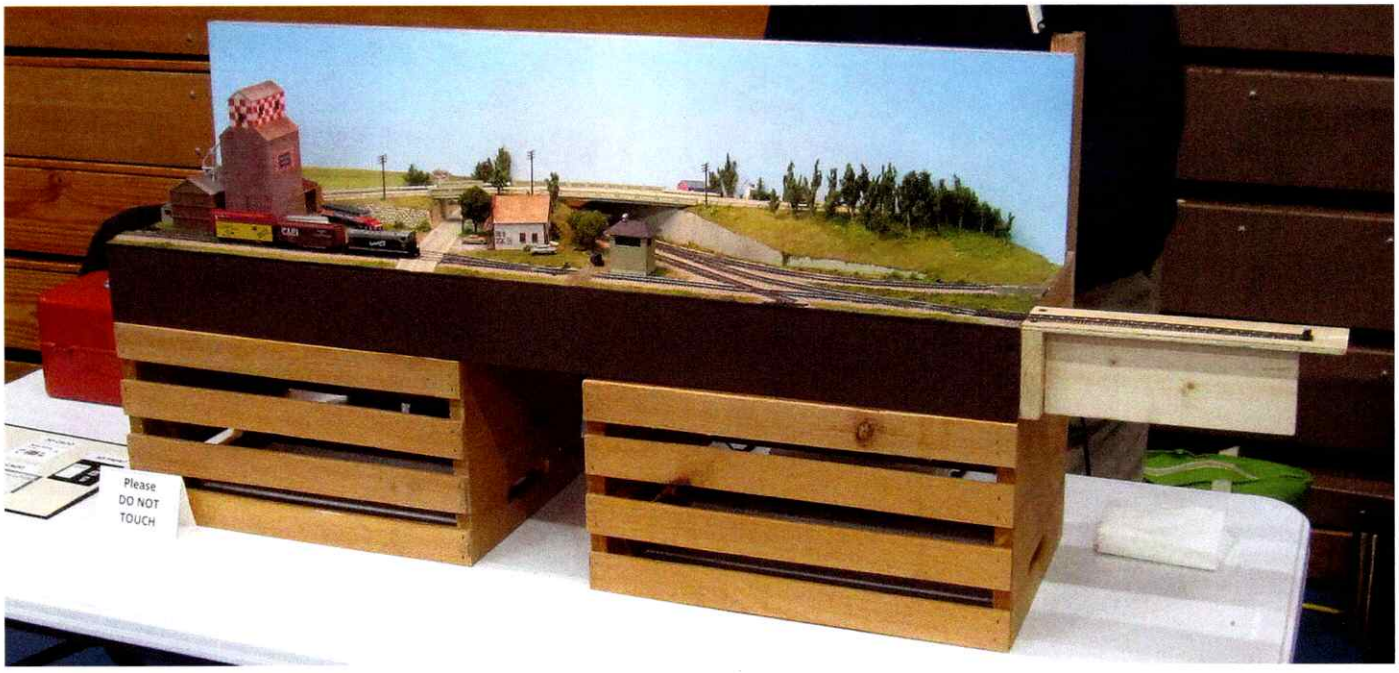


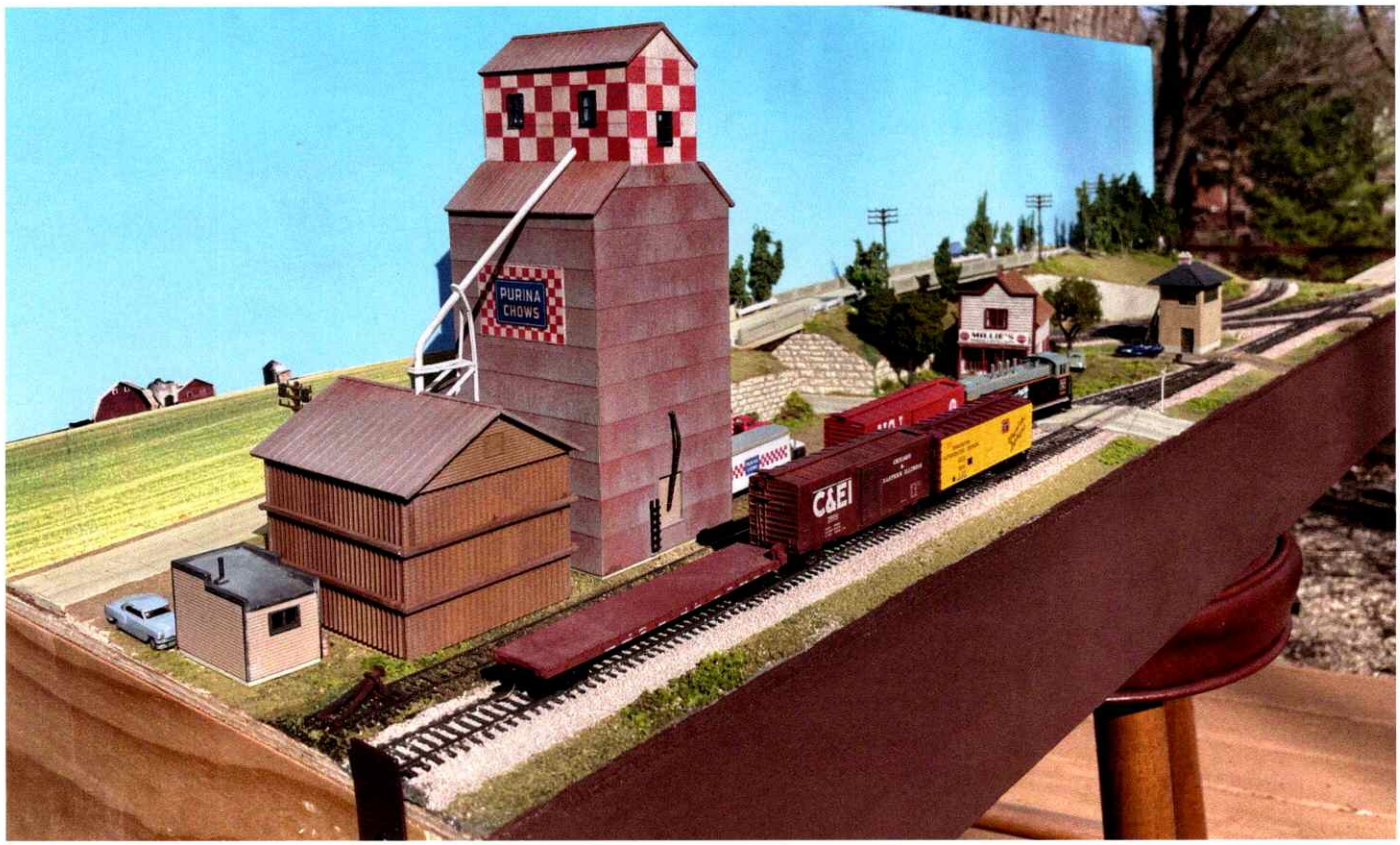
with my finger, and finally ran a wax candle over the road to give it a slight sheen. I decided to make my own guardrails for the road using 3D prints.

I then glued the finished road to the foam. The longer bridge was made using parts from the Walther's vintage overpass kit, and the small bridge rails are scratched from basswood. The abutments are basswood sheet, also spackled to hide the grain and for adding cracks.

The trees are from various companies. I like the Woodland Scenics birch trees because they are made of wire and the branches can be bent to any shape. The trees were all hot-glued in. Some of them I painted first (for flat brown trunks) and/or sprayed green. On some, I spray glued light yellow-green ground foam on the tops to suggest sunlit leaves.

I used a Chooch product for the block retaining walls. I added plastic mirrors inside the bridges to give the illusion of distance for the interchange track and the road (these were made from a product sold for wall decorations: they come





as flexible plastic pieces, but are perfect mirrors and easy to cut).

For the gravel parking areas, I used a real dirt scenic product sifted through a fine strainer and then sprinkled over wet Sculptamold. I dusted white pastel over Millie's lot to give a color variation and look more like limestone (which could be painted with a thin, very light gray as well). The grass and shrub areas were covered with various colors of fine and coarse ground foam. The sticky tufts of grass from various manufacturers really add to the realism, representing taller areas of plants around poles and against walls.

I painted some telephone poles (Atlas product) flat brown and weathered them with gray pastels, cut off the bases and then hot-glued them into holes along the back road. The red Purina truck is a Mini-Metals product, the white Purina trailer I made myself, and the autos are mostly Road Apples kits. The cross bucks are homemade using styrene strip.

Structures

Walthers offers a nice older grain elevator kit. I painted the walls gray first. I found a picture of an elevator

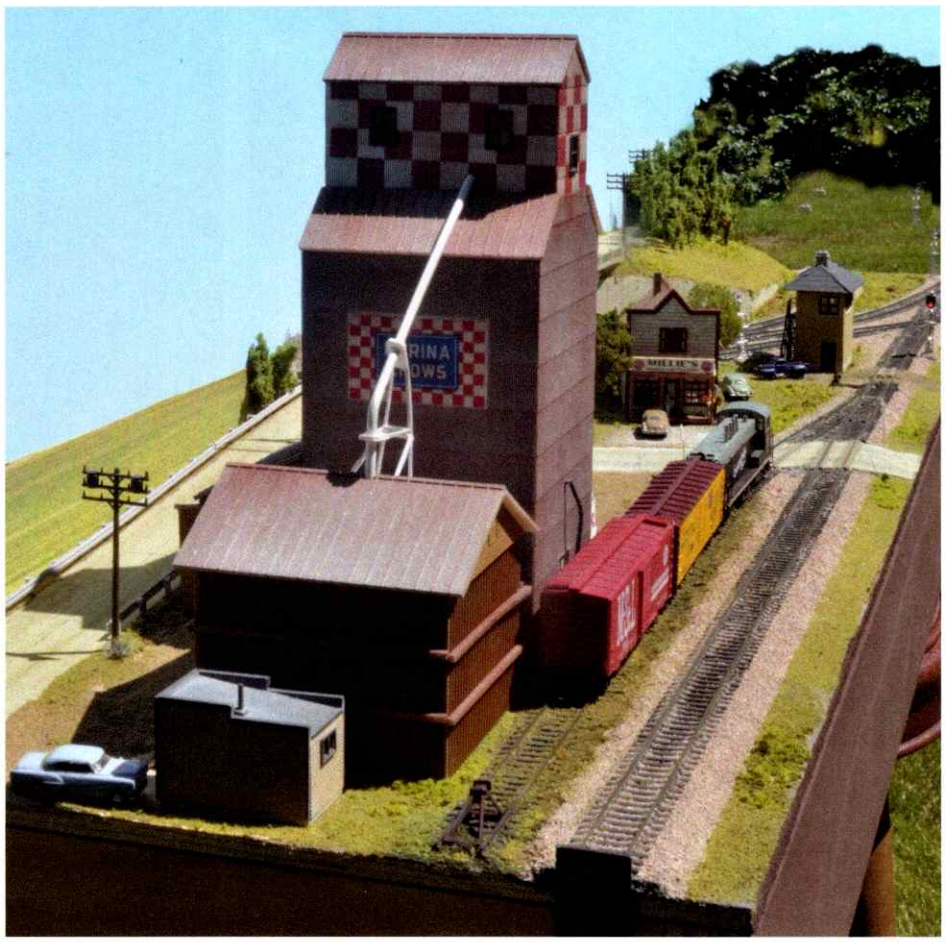
that had the familiar red and white Purina checkerboard pattern on the higher section, which I liked and decided to copy. I painted the top section of the elevator white, and I cut square mask parts from adhesive vinyl (bought at a craft store – you could use adhesive labels or tape as well). I laid them on the walls in the checkerboard pattern, and sprayed on the red color. On the main walls I streaked rust down from each corrugated panel top edge with pastels. I used brown pastels heavily on the storage crib and streaked the roof with light gray and brown. I assembled the models, and then decided on their placement next to each other in order to measure for the transfer tube that would be between the elevator wall and the crib roof. I used .125 inch plastic tubing for the tube, and I designed a simple support bracket assembly for the crib roof as a CAD file and printed it. I drilled holes in the crib peak and in the side of the elevator upper wall. I painted the tube and bracket assembly an off white and weathered it with pastels (gray on the underside). The four elevator roof pieces were rusted with pastels.

The tower was an attempt to print N scale brick with my 3D printer. The brick is not to scale, being just a little oversized due to the printer's capability. I covered the roof piece with masking tape to represent rolled roofing, and added a chimney from my spare parts bin. The stairway and rails are a commercial product, and I designed and printed the support pieces.

Millie's is my idea of a typical rural general store. The walls are laser cut from basswood clapboard sheet, and the windows and doors are 3D prints. The roof is commercial shingle sheet. I found some extremely fine steel screen and used it for a screen door. I made the signs in 2D CAD, obtaining the Coke symbol from the web. The chair is a Gold Medal Models etched brass piece. The cellar doors are from a kit.

The structures are all loose and transported separately from the layout. They are kept from shifting when placed in position by sitting snugly over thick basswood rectangles glued to the layout and cut to fit inside the bottoms of the walls.

The NMRA holds an annual show for the public in my area. I displayed the layout and there was a lot of interest. Some commented that they felt encouraged by my display to model something small. Small layouts offer a number of advantages. Although it operates, I like to think of this project as an artwork more than a layout – I like to "paint" scenes and invoke a feeling using models, as well as paint and sculpture, which is actually what we all do when it comes to layout scenery.



The Short & Nn3arrow

R-T-R & Custom-Built Nn3 Locos, Nn3 T-TRAK, and an Iconic Building on an Iconic "Shortline"

by **Tom Knapp, MMR#101**

Photo 1: Showcase Miniatures R-T-R Shays. See details at: *www.showcaseminiatures.net/nn3_scale/* (*Photos Showcase Miniatures*)

R-T-R Nn3

One of the obstacles to growth (and indeed the enjoyment) of Nn3 has always been the lack of ready-to-run (R-T-R) locomotives. There have been limited-run, usually expensive, brass locomotives such as the LOK-14 locos featured in the two previous issues, and offerings by Aspenmodel and in the past by Micro-Trains, but Nn3 will probably never see the availability of R-T-R models enjoyed by On30 modelers, or even HOn3 and HOn30 modelers. And while there are some highly skilled craftsmen out there who would probably be willing to tackle custom building an Nn3 locomotive for you, it might require taking out a second-mortgage on your house to afford it. The next best thing is a locomotive custom assembled from one of the excellent past or currently available kits. Showcase Miniatures has recently begun offering limited run assembled versions of their popular Nn3 Shay kits (***Photo 1***). Although not cheap, they are less than an HOn3 brass Shay – and remember, smaller is not necessarily cheaper! Find out more at the Showcase website at: *www.showcaseminiatures.net/nn3_scale/*

Photo 2: Custom Nn3 model builder Masaaki Tsuji of Kyoto, Japan.

Another alternative to the dearth of R-T-R Nn3 locomotives is to have a kit custom assembled for you. I used to do this for customers, but find I no longer have the time to do this. I recently discovered a very talented young model builder who is a member of the Nn3 internet group (*groups.io/g/Nn3*) who is willing to do this, and whom I have recommended to those requesting this service. He is Masaaki Tsuji of Kyoto, Japan (***Photo 2***), and his "resumé" is best illustrated by the collage of photos of his Nn3 work included in this column (***Photo 3***). Masaaki can be reached for commissions at: *og32ji@gmail.com* He also has a blog: *brass-and-mechanical.cocolog-nifty.com/blog/*

Photo 3: Nn3 models by Masaaki Tsuji of Kyoto, Japan, including his builds of Showcase Miniatures Shays. (*Photos Masaaki Tsuji*)

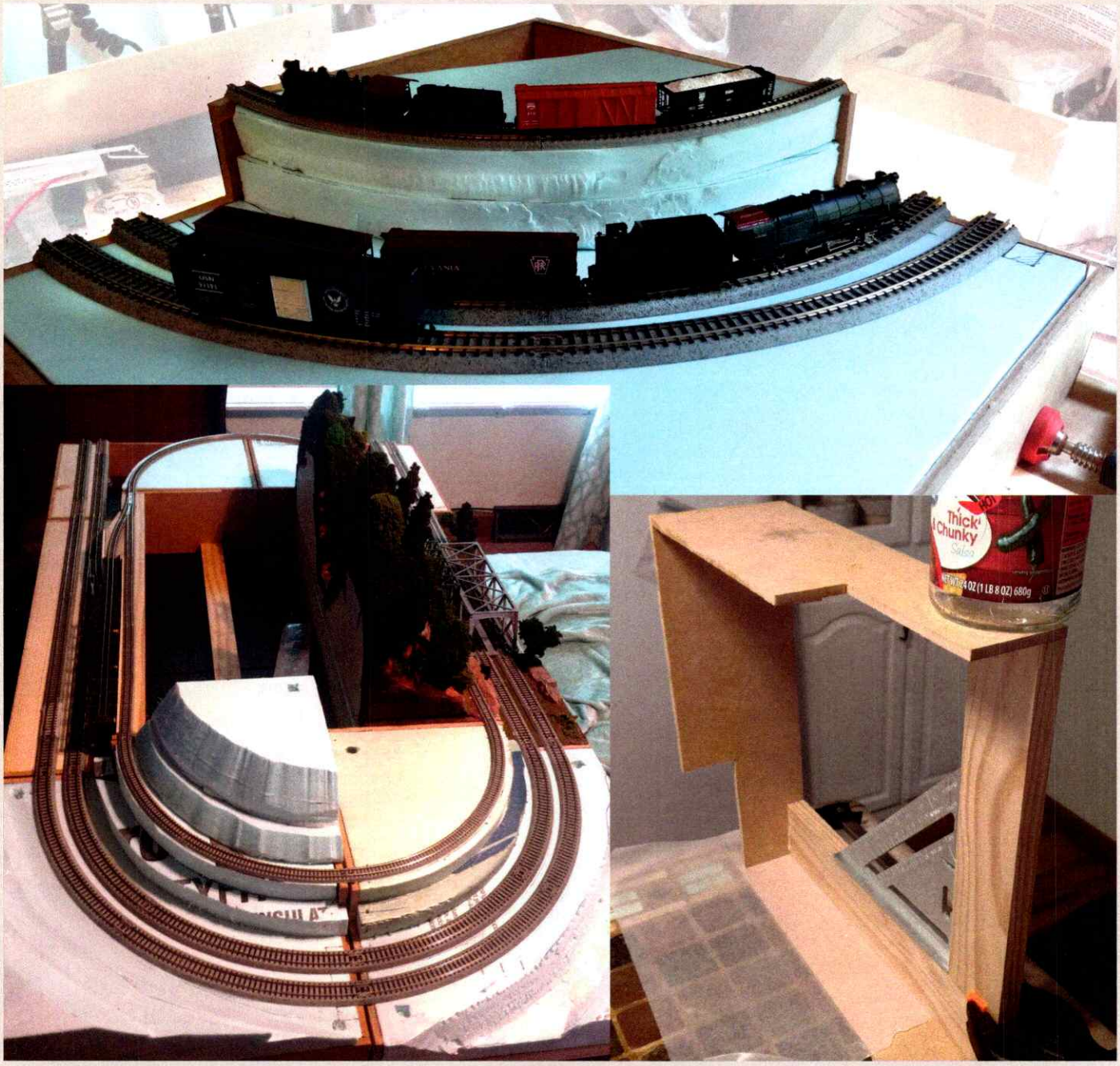


Photo 4: N/Nn3 T-TRAK modules under construction. (*Photos Larry Card*)

Nn3 T-TRAK

In previous issues of this column, I have exhorted N scale modelers to add a narrow-gauge line to their existing N scale layout or NTRAK module. Larry Card (another member of the online Nn3 group) has gone one better and included Nn3 in a set of T-TRAK modules he is constructing. He prepared a draft set of standards which he continues to test through construction. (E-mail me for a copy.) This has been and continues to be an adventure of discovery for Larry, and below he tells us how it is going so far:

Nn3 ON T-TRAK MODULES

T-TRAK has been gaining in popularity for display layouts because of its compact size. Setting up a T-TRAK layout as opposed to a standard NTRAK layout is much easier and quicker, and the modules are easier to transport and store between shows. Where the average modeler may not have the extra room to build and store an NTRAK module, most will have the room for one or more T-TRAK modules. This was the situation I found myself in. I wanted to get more involved in my club's show layouts, but I just didn't have the space to build and store NTRAK modules. I did, however, have room for T-TRAK.

Being a narrow-gauge enthusiast, I wanted to see what it would take to put some Nn3 on my modules. Rokuhan makes sectional roadbed track that is a good match for Kato Unitrack, used for the standard gauge track on T-TRAK modules, and the tie spacing, and size is acceptable for North American N scale. The 220 mm curve radius fits nicely inside the 282 mm radius of the standard gauge mainlines as well. The only drawback is that Rokuhan track

Photo 5: The sceniced straight T-TRAK extended sections: *top*: coal dock; *bottom*: bridges. (*Photos Larry Card*)

sections are 110 and 220 mm and the standard T-TRAK module lengths are multiples of 310 mm, so the Rokuhan track must be trimmed to fit.

To add interest to my modules, I decided to put the Nn3 on a mountain line, elevated 2" (51mm) above the standard gauge track height. This adds its own degree of difficulty since the module trackage must be carefully spaced in all three dimensions. The standard gauge track ends must be perfectly aligned in both length and spacing, but since the narrow gauge is elevated, it not only has to be aligned in length and spacing, but also height. To facilitate this, I built myself a pair of track spacing jigs, one for each end of the module, and so far, this has worked well.

So far, six modules are in various states of construction (***Photo 4***). Two of the modules are double length and have been completely built and sceniced (***Photo 5***). Two more are outside corners, which have the track laid and scenery work has begun. The last two are single length modules that have the narrow-gauge curving to the inside to join in the middle and complete the narrow-gauge loop. The six modules together form the end of a peninsula. They have been displayed at one private club showing, but so far have not made their debut in any public showings.

Some of the problems that were discovered in that private showing include the necessity to have absolute alignment between the three tracks. It was extremely difficult to align and connect the tracks due to slight misalignments in height on the narrow gauge. Errors that are forgivable for a

Photo 6: Larry Card with "dual-gauge" under-construction T-TRAK layout. (*Photo Larry Card/NTRAK*)

two-dimension standard-gauge-only module make connecting a 3-dimensional standard and narrow-gauge module a nightmare. There were also issues disconnecting the modules, where the track joiners are very secure in the Kato Unitrack, they aren't so firmly attached in the Rokuhan track. I have since glued the joiners in place on the Rokuhan track ends. I would like to see about having the construction jigs made of 1mm thick metal or perhaps 3D printed; In either case, they would have to be carefully constructed to exacting standards if modules were built by more than one modeler.

On the plus side, they worked well when all the issues were worked out and they were well received in their debut. A brief description of this event was on page 42 of the July/August 2020 edition of the *NTRAK Newsletter* (***Photo 6***).

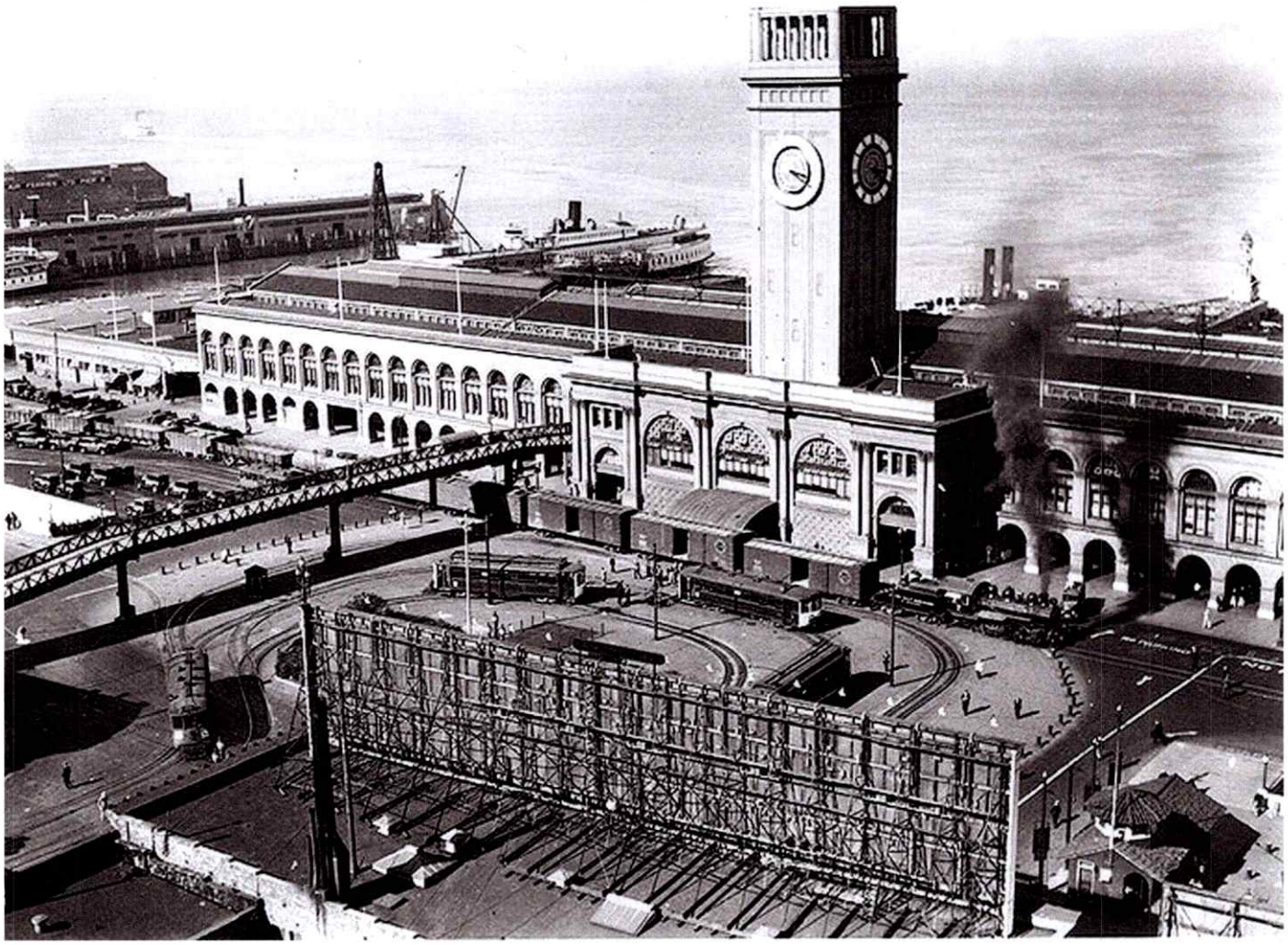


Photo 7: Railroad and trolly car action in front of the Port of San Francisco Ferry Building; the freight train is on the State Belt Railroad, while the trollies and streetcars are part of the San Francisco Municipal Railway ("Muni").

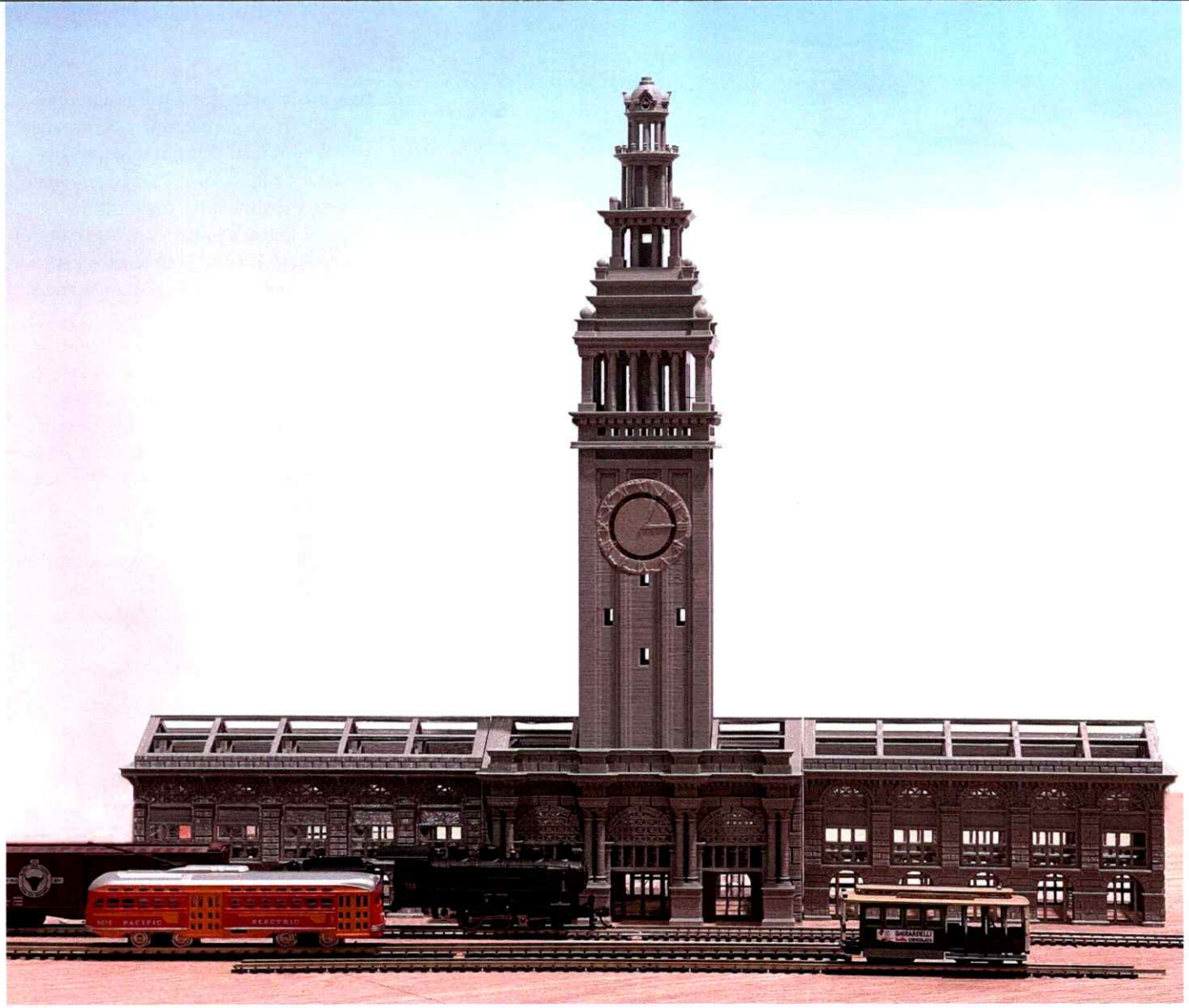


Photo 8: The Gold Rush Bay 3D-printed version of the San Francisco Ferry Building with some railroad and street railway equipment for scale.

THE SAN FRANCISCO FERRY BUILDING ON THE STATE BELT

The State Belt Railroad of California was a shortline that served San Francisco's waterfront for 100 years. Its tracks extended the length of the Embarcadero from south of Market Street to Fort Mason and the Presidio. The original tracks were dual-gauged, to allow transfer of narrow-gauge freight cars from the North Pacific Coast R.R. (Marin County) and the South Pacific Coast R.R. (Alameda, Santa Clara, Santa Cruz counties), as well as standard gauge cars. Cars were ferried in from around the San Francisco Bay and connected with Southern Pacific tracks at a small interchange yard located at Townsend and Berry Streets. Freight cars and steam locomotives ran next to the San Francisco trollies and streetcars that converged on the plaza in front of the San Francisco Ferry Building (***Photo 7***).

The book *The State Belt: San Francisco's Waterfront Railroad*[1] by William and Michelle Kaufman is an excellent history of this short railroad that played such an important role in San Francisco's waterfront and railroad operations all around San Francisco Bay. A layout built on this plan would offer a lot of operation with positionable car ferries (acting as "cassettes") on the north end of the layout and the SP yard on the south end. Central to this layout would be the San Francisco Ferry Building, a major scratch-building task.

The book's author, Bill Kaufman, is also a talented modeler who has constructed an HO-scale layout based on the State Belt, video of which can be seen at: *youtu.be/h3MFQZPs6SA*. More recently, John Petrovitz has built his own version of the State Belt in N scale. Video of this excellent layout can be seen at: *youtu.be/pBk72OGhArw* Central to both these layouts are models of the imposing San Francisco Ferry Building.

Now Gold Rush Bay (*www.goldrushbay.com/collections/all/n-scale*) has produced a 3D-printed kit for this building in N scale (***Photo 8***). The kit is composed of five main parts: the central hall, shortened versions of the two side halls, the tower, and the upper portion of the clock tower with the cupola (***Photo 9***). There are also separate 3D-prints for the large roof-top "PORT OF SAN FRANCISCO" sign which faces out towards the bay, the four clock faces and a second cupola in case of damage. The clock faces are separate from the tower in case the model builder wants to incorporate an alternative timepiece, which I will do with mine (***Photo 10***).

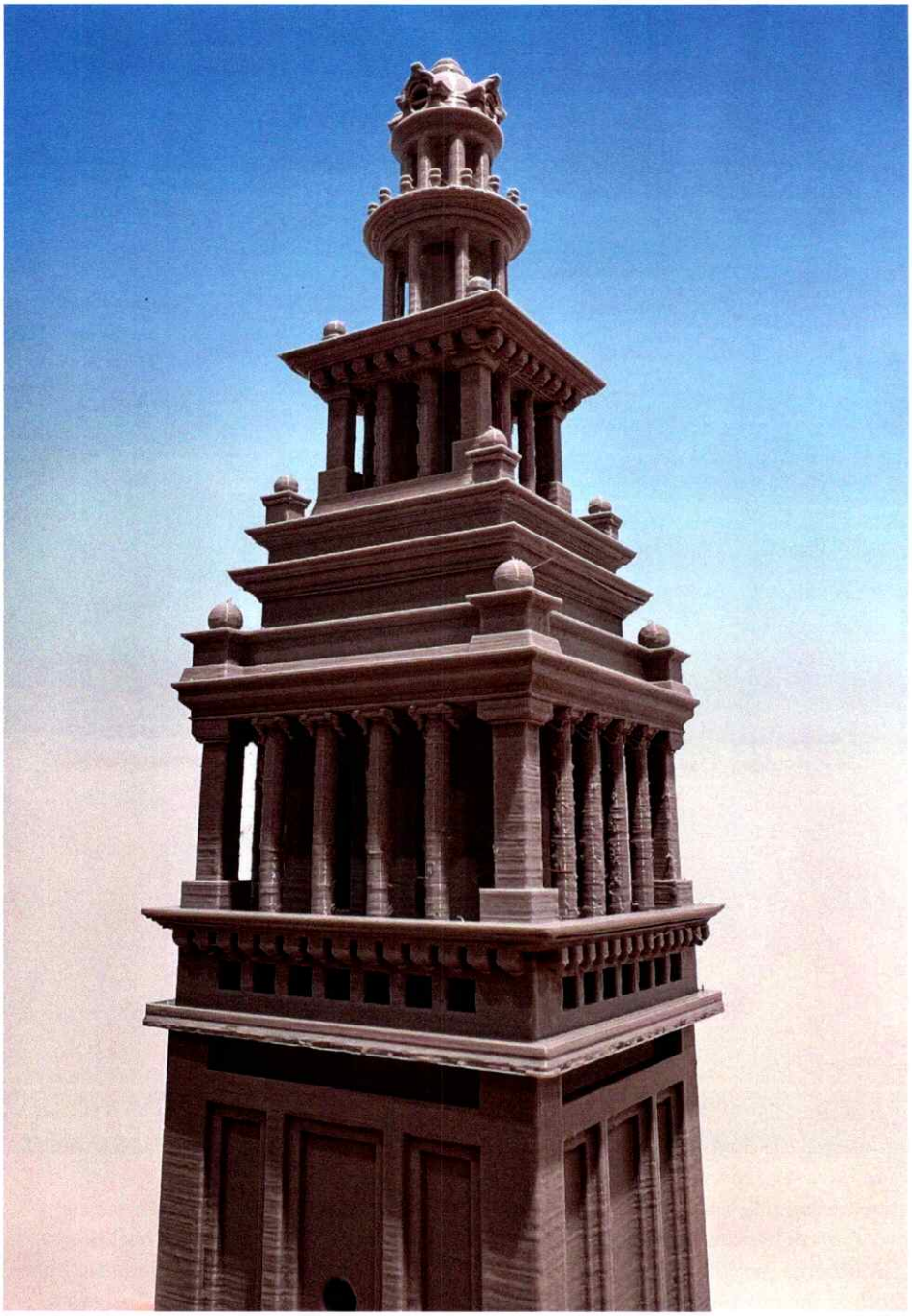


Photo 9: The ornate upper portion of the ferry building tower.

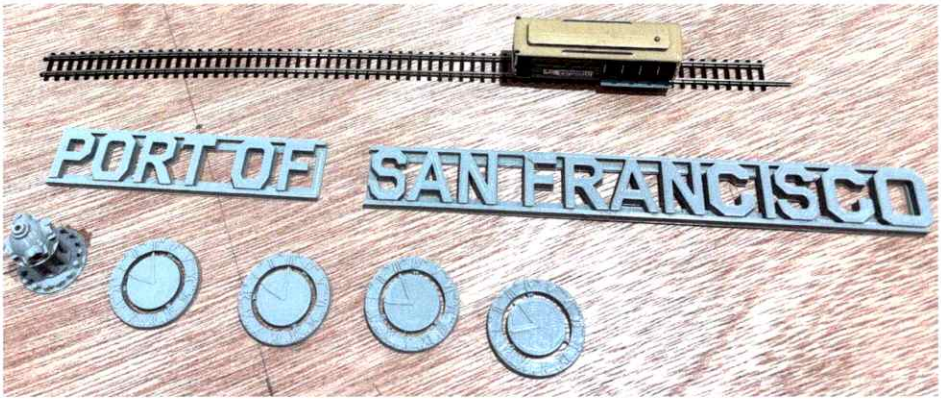


Photo 10: Included in the Gold Rush Bay kit are the "PORT OF SAN FRANCISCO" sign that faces out into the Bay, the four clock faces, and an extra cupola.

No other materials are provided, so the builder will need to source roofing and glazing materials. (See some of the links in "References" at the end of this column for historical information and pictures, which will help finish the model.) The interior is hollow and accessible for those who may want to install lighting. As mentioned above, two side wings of five bays each are included, which form a continuation of and are included. Contact Christian at Gold Rush Bay if you want additional side sections to model the entire famous 660-foot long "nave" (over 4-feet long in N scale.) The parts require minor clean-up and painting all the detail will be a fun task.

CORRECTION

The sidebar in the last issue describing the relative capacity of different "stay-alive" capacitors was incorrectly attributed to Tim Horton. The information was actually extracted from an e-mail conversation with fellow Nn3 modeler and electronics engineer Joe DuVivier.

FINALLY

... please e-mail me at *thomasknapp@att.net* with your comments, questions, and ideas for content. I would especially like to see the modeling of other Nn3ers out there that I could share with the readers of this magazine. Each reader out there has their own unique knowledge or skill which can be shared with the rest of us, so put pen to paper (or fingers to keyboard) and share with us. Also, manufacturers who have narrow gauge and shortline products and other products which help model the 19th and early 20th century, please let me know.

References:

1 *The State Belt: San Francisco's Waterfront Railroad* by Michelle S. Kaufman, William H. Kaufman 2013, Signature Press ISBN-10: 1930013345

2 *Railroad Model Craftsman*, April 2007: "*Modeling the State Belt R.R.*", Bill Kaufman, pg. 81

3 *www.ferrybuildingmarketplace.com/*

4 *www.ferrybuildingmarketplace.com/restoration/*

5 *en.wikipedia.org/wiki/San_Francisco_Ferry_Building*

BLOEDEL, STEWART & WELCH AT MYRTLE POINT

Article & Photography by **Graham Macdonald**

History

My model railroad is based on the Bloedel, Stewart & Welch Corporation's logging railway, which operated at Myrtle Point in Powell River, British Columbia, Canada from 1911 to 1928. Remnants of the original railway can still be found, including pilings from the log dump, trestle bents in the woods, a few scraps of rail, and remains of ties here and there. Rail beds are now hiking and mountain biking trails. Several steam donkey boilers exist in the area, although these were from other companies. As a boy, I was intrigued with these artifacts from the past. Any steam locomotives I saw were logging locomotives on Vancouver Island. I suppose that is why my interest in railroading is mainly the steam-logging era.

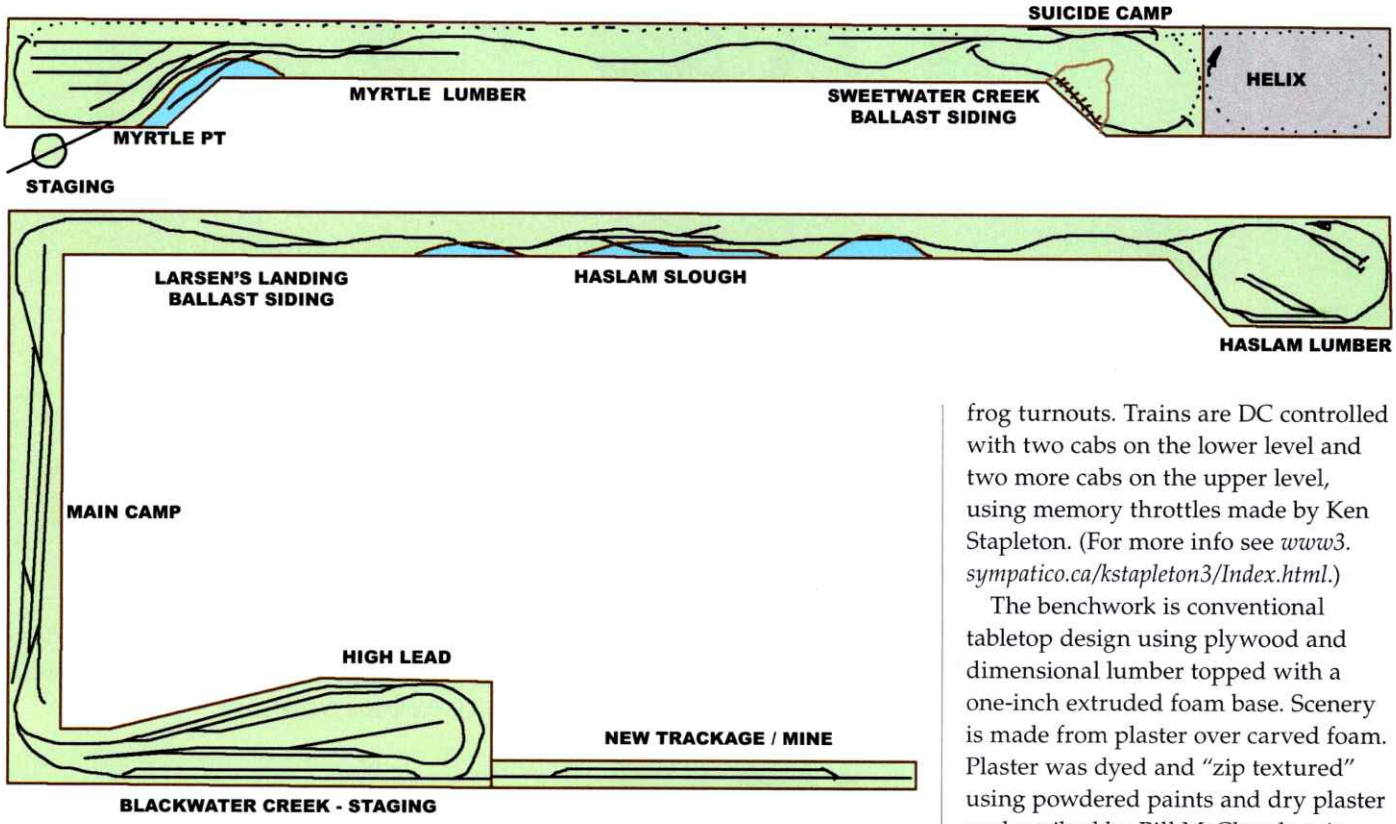
A book by Ken Bradley & Karen Southern, *Powell River's Railway Era*, offers the most information and photos of the BS&W at Myrtle Point. After 1928, all BS&W equipment went to their operation at Menzies Bay on Vancouver Island. A lot of photos can be found online of that operation. Their No. 1 Shay, originally from Myrtle Point, is preserved cosmetically at the BC Forest Discovery Center, located in Duncan, BC.

Layout Design

My layout started out as a 16-foot-long dog bone design with several sidings featuring the Myrtle Point log dump at one end and a spar tree and Suicide Camp at the other.

My interest in model railroading was mainly in designing, building and detailing, but after operating on Gord Campbell's Cascade, Laggan & Southern Railway (featured in the Nov/Dec 2016 issue of *N-Scale Magazine*) my interests now include operations. An upper level was added for more operational interest. The original lower level is now 22 feet long and the scenery is complete, although more detail will be added. At the end of the original layout, a seven-turn helix takes trains up a two percent grade to the upper level, which is 54 feet long, wrapping around three walls of the garage. All track on the upper level is operational, but no scenery has been started other than a few structure mockups.

All track is Peco Code 55 with electro



BS&W Track Plan

frog turnouts. Trains are DC controlled with two cabs on the lower level and two more cabs on the upper level, using memory throttles made by Ken Stapleton. (For more info see *www3.sympatico.ca/kstapleton3/Index.html*.)

The benchwork is conventional tabletop design using plywood and dimensional lumber topped with a one-inch extruded foam base. Scenery is made from plaster over carved foam. Plaster was dyed and "zip textured" using powdered paints and dry plaster as described by Bill McClanahan in the book *Scenery for Model Railroads*,

Photo 1: Shay # 17 hauls a string of loaded skeleton cars across a trestle. The Shay is a brass Overland model (Western Maryland #6), rebuilt, painted and numbered 17 by Maynard Atkinson. The real #17 operated at Menzies Bay on Vancouver Island.

Photo 2: Supplies are unloaded at Suicide Camp. Caboose # 11 is scratch-built from styrene. Suicide Camp is a JV Models kit.

Photo 3: Mainline Mallet # 9801 pulls a string of empties on their way to the high lead. 9801 is a fictional, but believable Baldwin Mallet. The model started as a Micro Ace 0-6-6-0 Baldwin built for the Japanese National Railway. Maynard Atkinson did the conversion and paint. BS&W did have a 2-6-6-2 saddle tank Mallet at Menzies Bay on Vancouver Island BC, which was their number 6.

published by Kalmbach Books. Woodland Scenics products are used for ground cover and bushes, shrubs etc. Evergreen trees consist of a mix of natural and commercially available trees such as Heki and Woodland Scenics in the background, and taller handmade trees in the foreground. The foreground trees are made with

Photo 4: Shay # 1 loads skeleton cars at Suicide Spar. The donkey is a resin casting with details added. The sled, water tank, fairlead, etc. were scratch-built.

Photo 5: Shay #1 delivers a load of logs to be cut up into ties and planks.

a carved and painted trunk, wire for dead branches and furnace filter chunks for finer branches. The trees are sprayed with Elmer's spray glue, and then green ground foam is sprinkled over them. A light misting of yellow paint is applied from above, making the trees a lighter shade from above than when viewed from eye level.

Photo 6: The scratch-built interior of the little sawmill. The building is a JV Models kit.

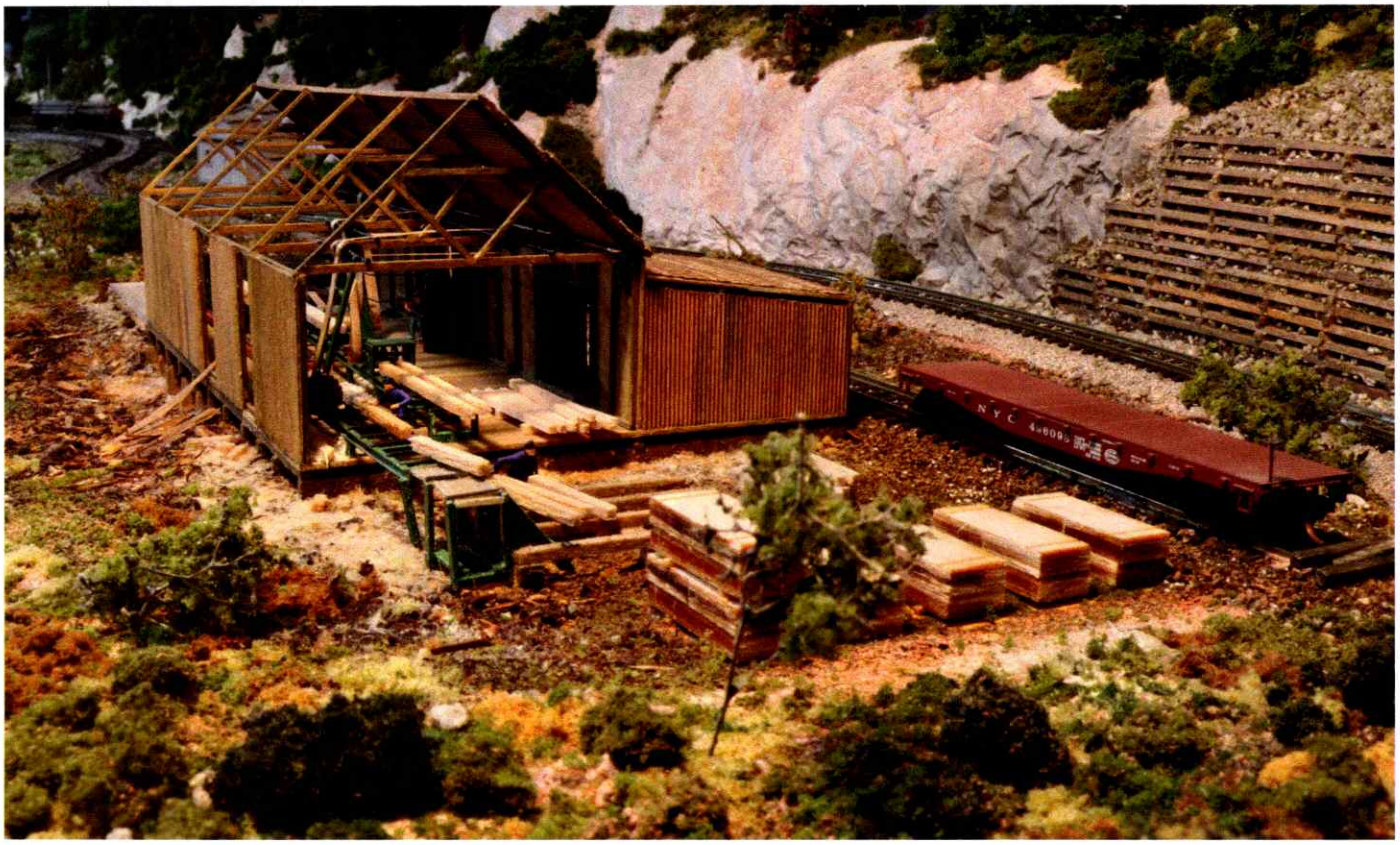


Photo 7: Another view of the little sawmill, with the roof removed.

Photo 8: Logs have just been dumped at Myrtle Point.

Photo 9: Shay #1 on switching duties at Myrtle Point. Another trainload of logs has just arrived.

Photo 10: While most are busy working, a few others are enjoying a game of checkers.

Structures

Myrtle Point has an engine house (a Laser-Art kit by Branchline Trains), a Tichy Trains water tower, a scratch-built RIP open framed carshop, a scratch-built log dump with gin poles, several small scratch-built buildings picked up at train shows, and a few camp buildings.

There is also a tie and plank mill at Myrtle Point (a JV Models kit) with scratch-built machinery. The head saw, shotgun carriage, gang and trim saws are built from styrene. A small vertical steam engine drives all the equipment with shafts, pulleys, and belts.

Suicide Camp has a small logging camp (another JV Models kit) and a scratch-built spar tree with a McLean boom, powered by a steam donkey. The donkey is a resin casting with brass steam piping added. The sled, fairlead and water tank were scratch-built.

There is one pile trestle scratch-built from bamboo skewers and basswood, and a smaller trestle kitbashed from a Walthers kit using dowels for the center span.

Equipment

The equipment roster started with one Atlas Shay and six Micro-Trains skeleton cars. It now consists of several Atlas Shays, one brass three truck Shay, several rod engines, a scratch-built logging caboose, two box cars, a water car, three oil tank cars, several flat cars, and about 30 skeleton cars.

Operations

Several years ago, a group trip to Englewood Railway of Western Forest Products at Woss, BC on Vancouver Island provided some insight to prototype operations. We were able to talk to the dispatcher and other employees. This operation has since been shut down.

Regular operating sessions are held using car cards, waybills and a 4:1 fast clock. A typical session keeps 3-4 operators busy for four hours with a break for lunch.

Mainline rod engines pull empty skeleton cars from Myrtle Point yard to camps and reloads, and return with loaded cars to the log dump, where a Shay is given switching duties. Shays haul skeleton cars from Main Camp (on the upper level) up a grade to the high lead and back. Also, supplies must be brought to camps, and loads of ties, rail and ballast are needed for new trackage to the next cut block.

Future Plans

Now that the lower level is complete, immediate plans are to pay some attention to rolling stock. Several cars and locomotives require paint, weathering, and numbering. Another logging caboose has to be built, and MOW cars require finishing. Once these projects are done, focus will turn to scenery on the upper level.

The layout may also be expanded for more operational interest. A scene with a trestle under construction would require a steam or gas shovel and a pile driver. It would also provide a destination for construction material such as pilings and rail. And while it did not exist, a barge terminal would provide an interchange with the outside world.

Photo 11: Assemblage of locomotives on the BS&W logging railway at Myrtle Point.

Photo 12: Another view of the locomotives posed at Myrtle Point camp.

Restoring and Improving Locomotive Contacts

by **Ken Harstine**

If you like operations as much as I do, then you know how frustrating it is to constantly prod your locomotive to move. In N scale, that means the contact system of the locomotive must perform nearly flawlessly. The larger scales suffer the same problems to lesser degrees and will benefit from the same fixes. The enemy of good electrical contact is corrosion and contaminants. Both of these occur naturally over time. I have worked out a process that, in addition to clean track, provides nearly flawless operation in switching. Of course, you have to start with a good locomotive design and track work. The contact system developed by Kato in the late 80s and copied by many others, including Atlas and InterMountain, is the best. Don't take short cuts on track work either. Power all those frogs and make sure the points are reliably powered. This article is aimed specifically at N scale diesels and electrics, but the ideas can be applied to any scale and type of locomotive.

As a locomotive ages, the contacts become corroded. Even a new locomotive can have corrosion and might have other contaminants on the contacts. I will describe how to remove corrosion, prevent corrosion in the future and often make it perform better than when new.

The first step is to disassemble the locomotive and trucks. Remove the shell and fuel tank.

The shell and walkways should lift off with a little gentle prying from underneath. The tank also pops off and this allows the leaf contacts to come free ***Figure 1***.

To remove the trucks, you need to partially back out the screws that hold the chassis halves together until the trucks drop out.

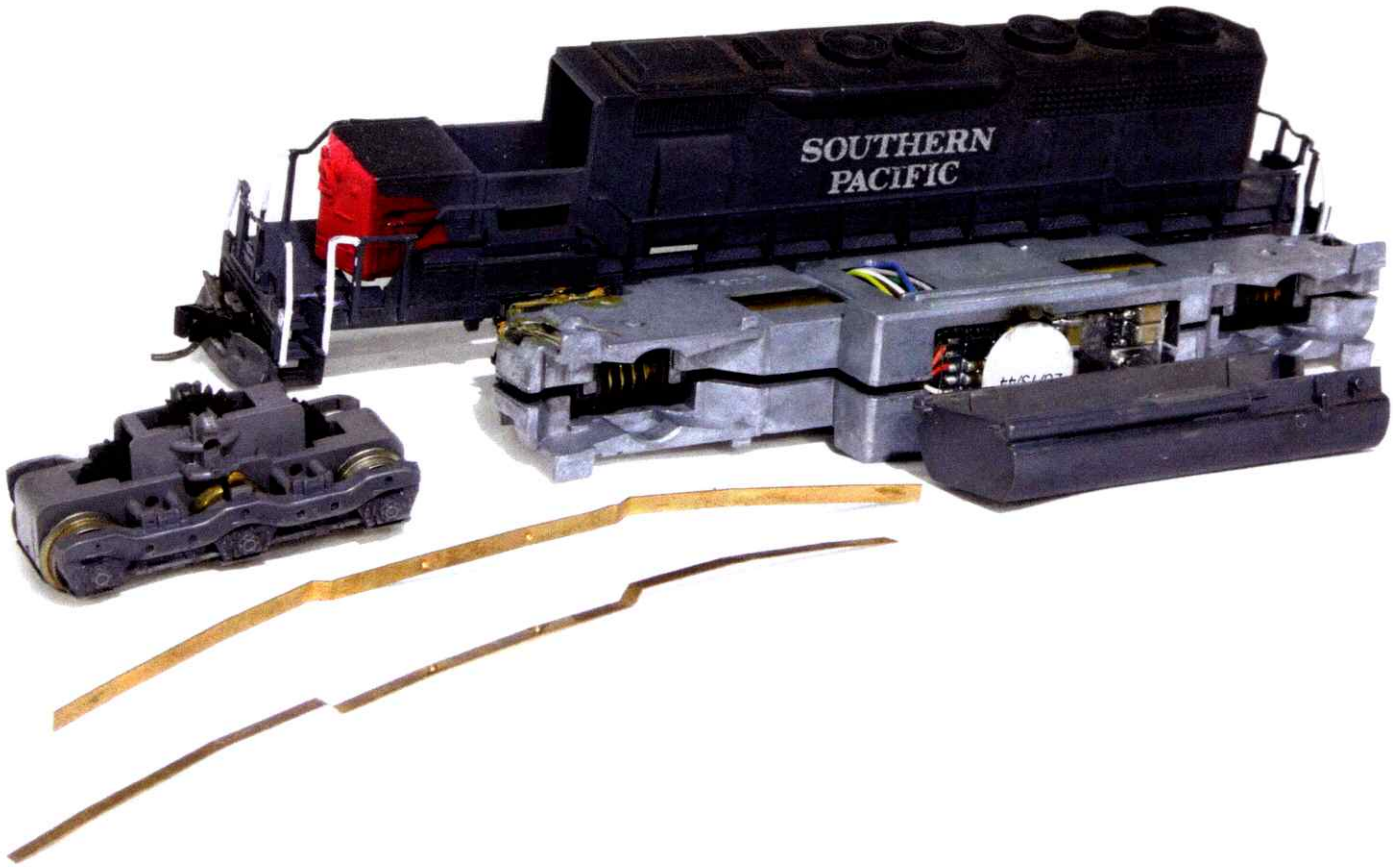


Figure 1

Figure 2

Figure 3

Now disassemble the trucks by gently prying the side frames from the truck. When the side frame is removed, the journal contacts will be free. The wheel sets can now be popped out ***Figures 2 & 3***.

To clean and remove oxide from the parts, I recommend the use of a fiberglass-burnishing tool such as sold by Micromark or Eurotool BRS-295.00. When cleaning is finished, I apply a tiny amount of Sanchem "No-ox-id A" grease to the contacting areas to prevent re-oxidation. Oxidation is a particular problem where two different metals are involved, and air and/or water are present. This even applies to brass on brass contacts because the brasses may contain different concentrations of elements. The "No-ox-id A" grease helps by keeping the air and water away from the metal.

Start the cleaning process with the leaf contacts. Clean both the parts that connect to the trucks and the nubs that connect to the chassis ***Figures 4 & 5***.

Next work on the wheel sets. Examine the plating on the wheel sets. If the plating is worn through to the brass, then it is best to replace the wheel sets entirely. You can get replacement wheel sets from most manufacturers. The cleaning process removes oxidation and also chemical blackening ***Figure 6***.

To clean the wheel sets, I lightly clamp the tread surface into my electric drill chuck. Do not clamp them by the flanges. Warning: over tightness can dent the wheel surface. Perfect alignment is not necessary. I run the drill at high speed and apply the fiberglass tool

Figure 4

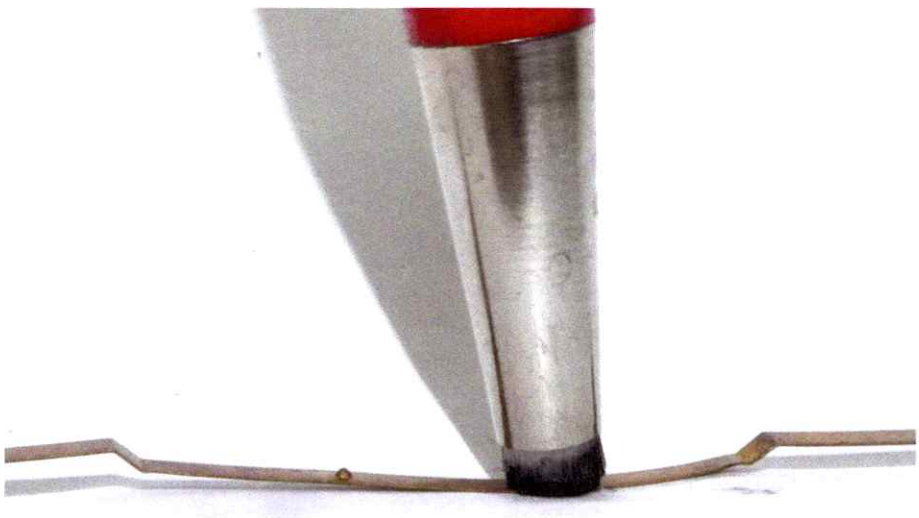


Figure 5

Figure 6

with light pressure until the wheels and the needlepoints are shiny. The wheels may pop out of the drill occasionally. It is better to have them drop out than to have over tightened them ***Figures 7 & 8.***

The metal ring on my low-cost DeWalt drill spins independently, and this allows me to steady my hand by resting it on the ring while running the drill.

Now clean the brass truck contacts. First clean the round surface where contacts are made with the leaf springs. Next clean out the pockets. To clean out the pockets, I place a round wood toothpick into the chuck of my hobby drill. I dip the end of the toothpick into polishing rouge. Polishing rouge can be obtained from Dremel and other sources. I then run the drill at speeds of 5-20 KRpm and apply moderate pressure when inserted into the pockets. Use the sharp end to do the bottom of the pockets and when the toothpick becomes dull, clean the remaining surface of the pockets. The speed and pressure should not be so much as to cause the toothpick to char ***Figure 9.***

When finished, remove any traces of polishing rouge with a chemical solvent such as rubbing alcohol.

Now apply a light coating of NO-OX-ID "A Special" grease to the needlepoints of the wheel sets and to the contacting surfaces of the leaf springs. Re-assemble the trucks. Check for free-rolling characteristics of the trucks and redo the process until they are assembled and roll freely. Take this opportunity to make certain that all moving parts and gears are lubricated. The gears should have a little Teflon grease and the various gear axles bearings should have a tiny amount of plastic compatible oil.

Reinstall the leaf springs into the chassis and bend them downward to

Figure 7

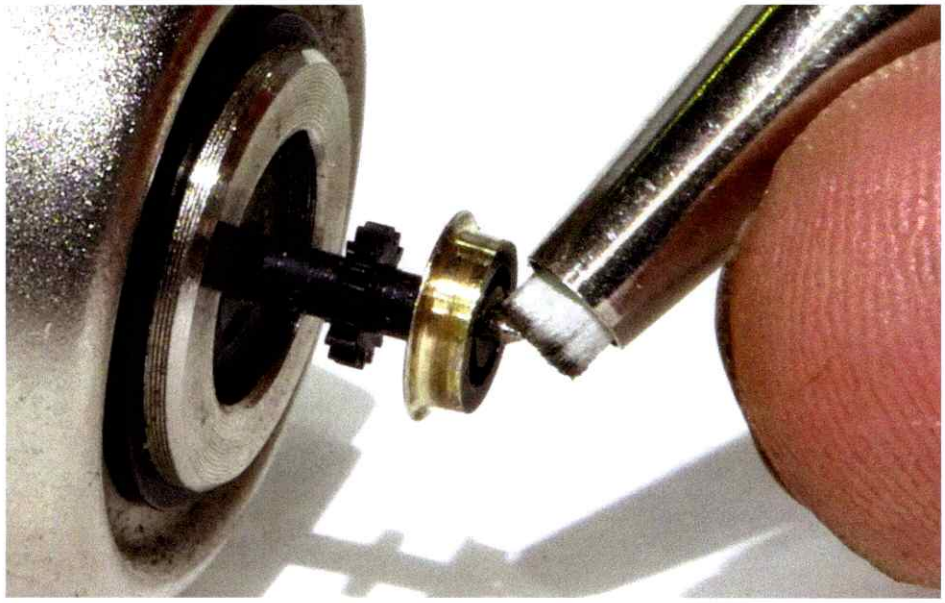


Figure 8

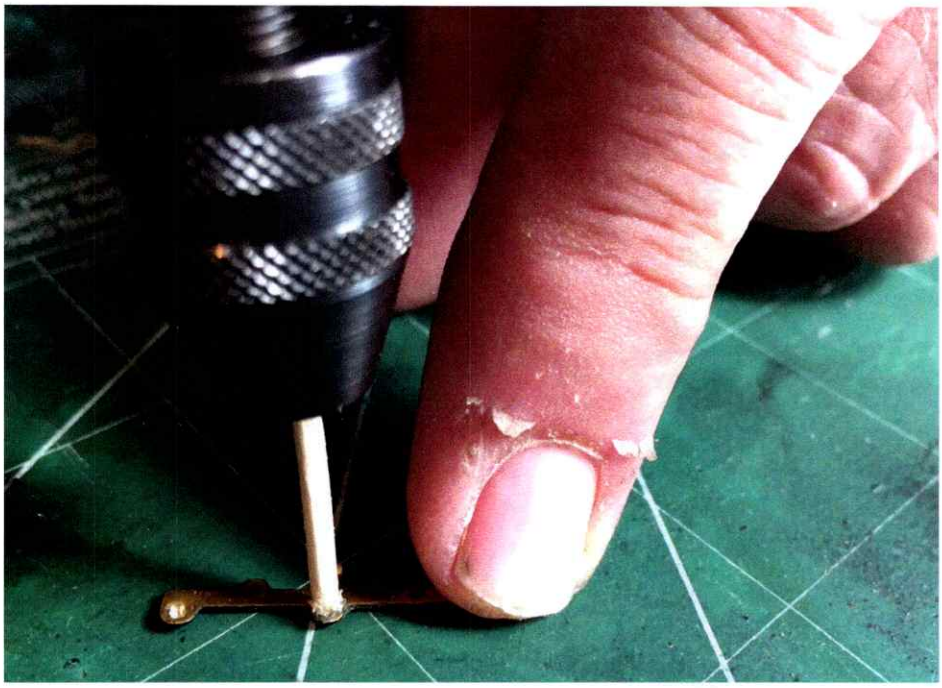


Figure 9

increase their contact pressure when the trucks are re-installed.

Install the trucks into the chassis making certain that the leaf springs all contact the points on the trucks. The last important step is to re-gauge the wheels using the NMRA gauge and a hobby knife to prod the wheels into gauge ***Figures 11 & 12***.

I have performed this procedure on many engines and now have a fleet that I consider switching certified. I am a member of a couple of operating session round robins and we have had several sessions on my layout. I use a version of car cards, waybills and car orders and operate according to timetable and train orders. The track work on my layout is about 1/4 complete at this point. The layout progress can be viewed at *sward.smugmug.com/Model-Trains/BasementLayout/*

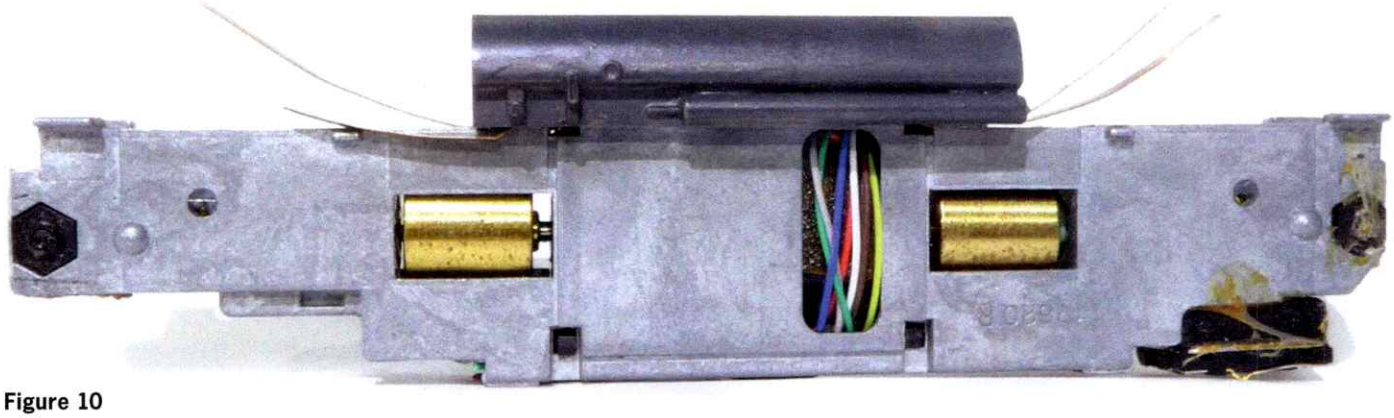


Figure 10

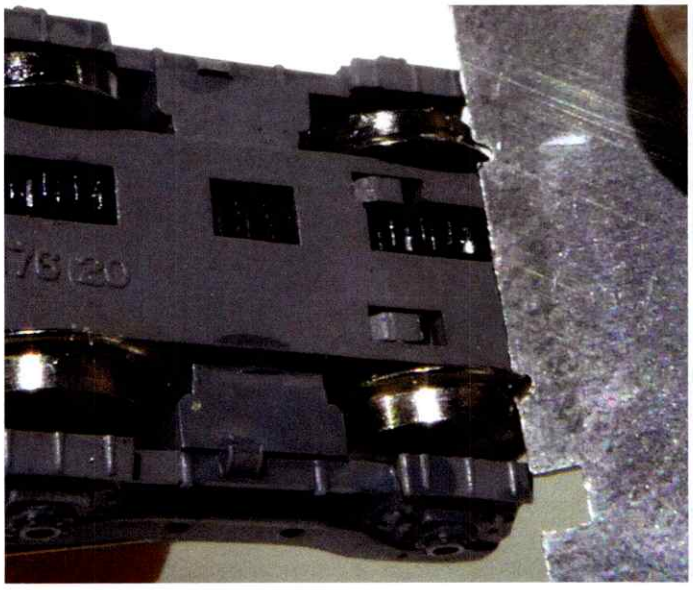


Figure 11

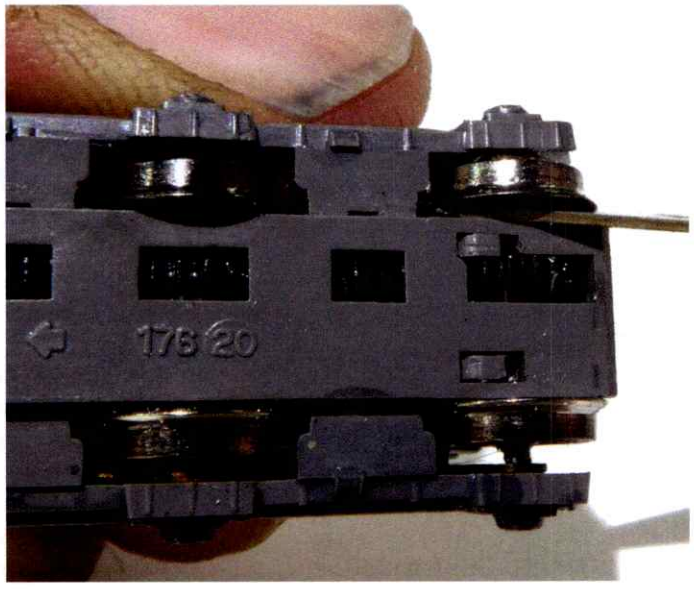


Figure 12

IN PURSUIT OF WOW

PART 19 – GHOST SIGNS AND THE FINDING OF ALL THOSE GREAT DECALS OUT THERE

by **Dennis Machlica**

Photo 1: The Brooklyn Docks Railway is filled with tons of painted-on signs.

In Part 16 of In Pursuit of WOW (*N-Scale Magazine*, July/August 2022), I mentioned my affinity for old advertising signage often painted on the sides of buildings and structures. Ever since starting my former advertising career as an Art Director of TV and print advertising at New York's Young & Rubicam, I have always held an interest in all forms of historical advertising and graphic design.

Before the modern age of advanced printing techniques and color billboards, signage was often hand painted on the sides of buildings, either to identify the owner of the building, or for non-related commercial advertising purposes. Many of these ancient signs remain today and are lovingly preserved, often referred to as ghost signs. So, this installment can be of interest for any modeler creating period scenes from the early 20th Century to those running Evolution engines on a contemporary 2022 layout.

In Part 17 (*N-Scale Magazine*, September/October 2022), I demonstrated the kit-bashing of a Reed Books kit from Design Preservation Models, with walls large enough for the application of such huge advertising graphics (***Photo 30***). Many of you are probably wondering where I found the Doublemint Gum advertisement

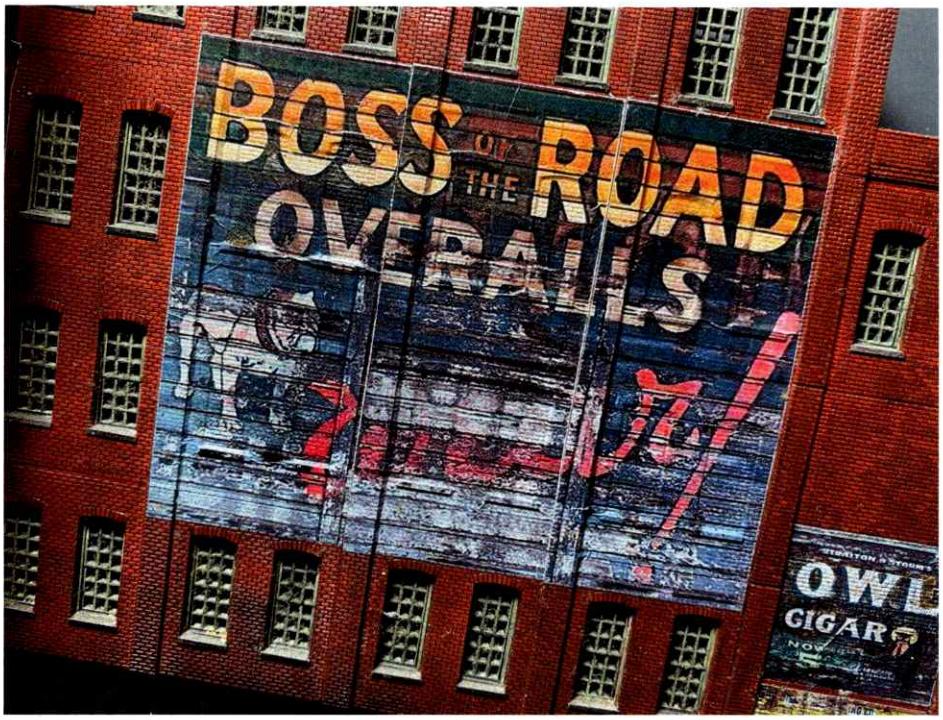


Photo 2: A close up view of the biggest sign of all.

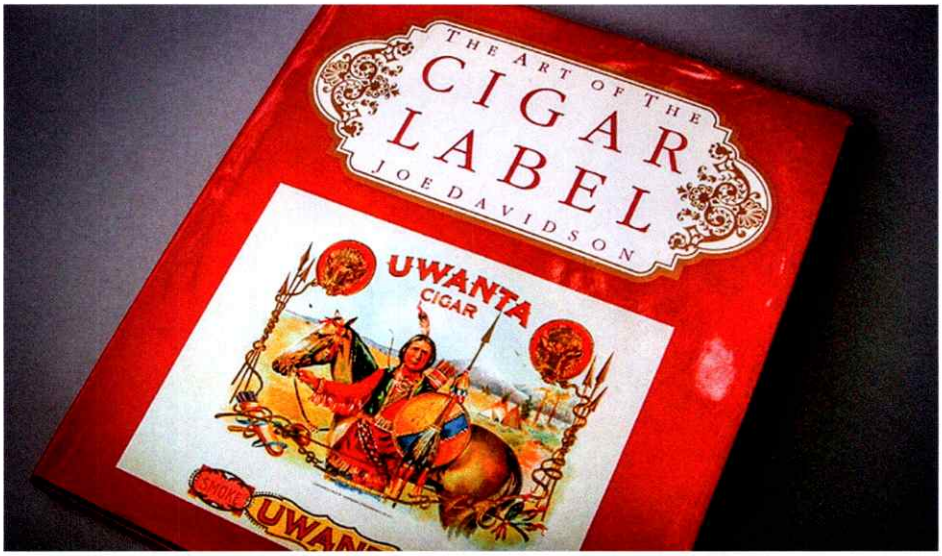


Photo 3: *The Art of the Cigar Label.*

featured on that model, so that is the impetus behind this article.

In this installment, we will take a look at where we can find the inspiration to create such signage, either by creating our own homemade decals or by purchasing ready-made ones for any kind of signage we want to apply to our models.

The diorama in ***Photos 1 & 2*** illustrates my penchant for old advertising and has been a lot of fun to design and build. And while it was developed as a platform for digital photography so I could sell a few of the older items of my N scale collection on eBay, it has still never been used for that purpose. Its real claim to fame is for being used as the background in more than a handful of articles of the *In Pursuit of Wow* series!

Yes, it is true!

And while you say, "I don't remember seeing that before," it is because I have never revealed it from such a perspective or from such a wide angle as here. One reason is that 75% of the diorama is still unfinished and lies outside the boundaries of this image!

But after I accomplish more on this 30" × 15" Brooklyn Docks Railway scene, with all its street trackage and the East River car float operation in the unforeseen foreground, I will gladly share its story and explain how it was built, perhaps in an article or two about the process and its features.

But until then, you might note that there are only four actual freight cars in this photograph. The others are simply a reflection of those four cars in the "front surface" or "first surface mirror," positioned perpendicular to the rails

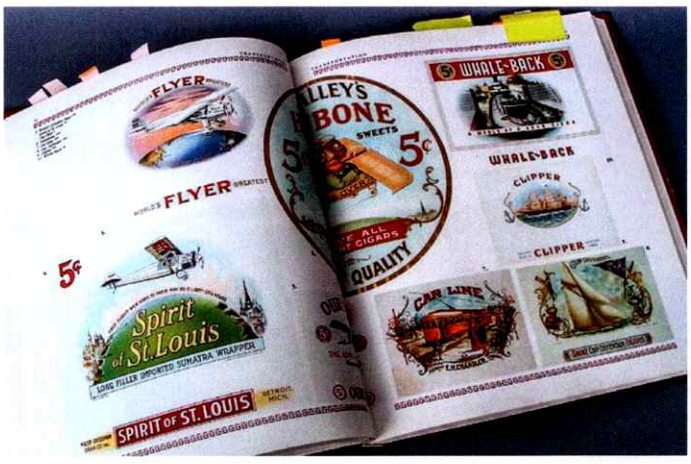


Photo 4: This book is a treasure trove of potential wall signs.

Photo 5: These signs would make great Ghost Signs on the walls of a nicely weathered structure.

and beneath the "Boss of the Road" building. But I digress.

One thing is certain though – the scene is plastered with all kinds of signage – with still more to come! It is this kind of detail that ads a lot of human interest to a scene and draws viewers in, with questions like "who lives here and what is going on?"

Wall Sign Sources and Inspiration

I have found all kinds of inspiration in many art or historical books available on tables at brick-and-mortar bookstores, especially around Christmas when curiosity seekers are shopping for interesting holiday gifts. Before the days of online booksellers, I often would pick up "coffee table" books on various interesting design topics like *The Art of The Cigar Label*, (Joe Davidson, Published by Wellfleet, 1996), one of the prized books in my collection (***Photo 3***).

This hardcover book is filled with dozens and dozens of historical cigar box labels, all of which would make great and extremely interesting ad graphics on the sides of our structures (***Photos 4 & 5***). With the advent of our ability to now scan and print our own

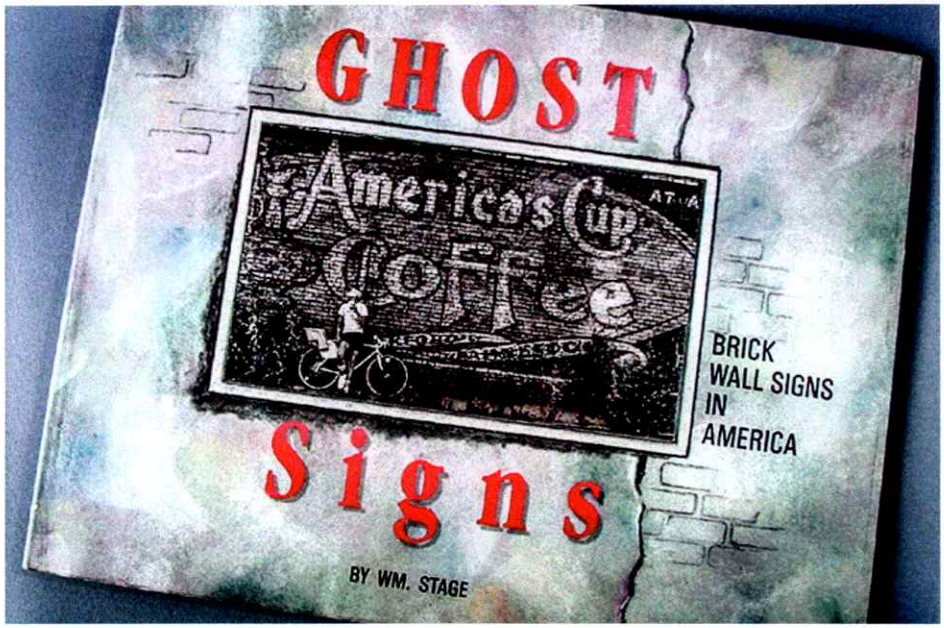


Photo 6: *Ghost Signs — Brick Wall Signs in America* is an excellent source for ideas on creating custom signage.

Photo 7: Back in the early days the advertising was brazen!

Photo 8: Even the sign companies got into the act.

homemade decals on either inkjet or laser compatible decal paper, our creative abilities seem endless. (For those unfamiliar with, or inexperienced with the printing of homemade decals, I will cover the ins-and-outs of the process and where to find the necessary materials in the next installment of this series).

Ghost Signs – Brick Wall Signs in America was my first book on this specific topic, written by William Stage, a de facto archeologist on the subject (***Photo 6***). His images are signs of a lost civilization – Americas early supergraphics. Many of these signs, like Indian petroglyphs of old, promoting products long gone at prices we could only wish for, are still with us today.

Arthur Krim, founding member of the Society of Commercial Archeology, said it best in the Foreword to the book: "In their boldness and simplicity, these signs of bygone brands like shoes, coffee or motor cars speak of another time, the infancy of American advertising."

Author Stage's lost civilization extends from the nations' major cities to rural towns spread across the American heartland. It is from the old downtown districts to the edge of railroad yards and factory complexes that Stage has recaptured the forgotten spirit of American life. It is only fitting that we as model railroaders implement many of these symbols into our own visions of days gone by.

Photos 7 & 8 reveal to us an amazing boldness of commercial enterprises from the early 20th Century, and what a revelation of those times they are. While many of the images of the book are in black & white, they are an immense treasure trove of ideas we can emulate on our models. One of the best color images from the book is the Gold Medal Flour sign photographed by Stage in his hometown of St Louis in 1983 (***Photo 9***).

An example of combining our own home-made store signage with either

Photo 9: This is a terriffic example of a well preserved Ghost Sign.

Photo 10: You can combine your own custom store sign with a commercially available billboard decal.

our own custom advertising decal or a commercially available one is illustrated in ***Photo 10***. And the signs of these past eras weren't always small affairs, as illustrated in ***Photo 11***.

Another excellent work by William Stage is *Fading Ads of St Louis*, (The History Press, Charleston, SC, 2013) shown in ***Photo 12***. This work features many more color examples, with ***Photo 13*** being an excellent example.

I highly recommend both these William Stage books to any serious model railroader interested in featuring this type of interesting signage.

In Frank Mastropolo's book, *Ghost Signs – Clues to Downtown New York's Past*, (Schiffer Publishing, Atglen, PA, 2019), he discusses ghost signs cast into the front of buildings and those made of wood and metal as well (***Photo 14***). A particular twist to this collection is that Mastropolo tells the story behind the existence of each sign and its building, and each one is a delight to read.

One particular example is the personal account of Polish immigrant Samuel Beckenstein's clothing manufacturing business in lower downtown. Starting life in America as a dealer of remnant fabrics from a sidewalk pushcart, he grew his business to a thriving enterprise, catering to men who couldn't afford to buy a new suit every time a pair of pants wore out. Sam bought left over fabrics from all the major suit manufacturers, carefully catalogued all the items, and began making new pants, matching the men's original suits! The business was such a great success, he ended up shipping between 400 and 500 new pairs of pants every week. Apparently, the 1932 song *Sam, You Made the Pants Too Long*, cowritten by Milton Berle, was purportedly about Samuel Beckenstein and his business. Barbara Streisand released a version of the song in 1970.

The image of his store front would surely be an amazing model if anyone were to recreate it (***Photo 15***).

Ben Passikoff's collection of ghost signs in New York began while being a member of the high school photography club at New York's Browning School, a private college preparatory institution

Photo 11: Supersized signs were not unusual.

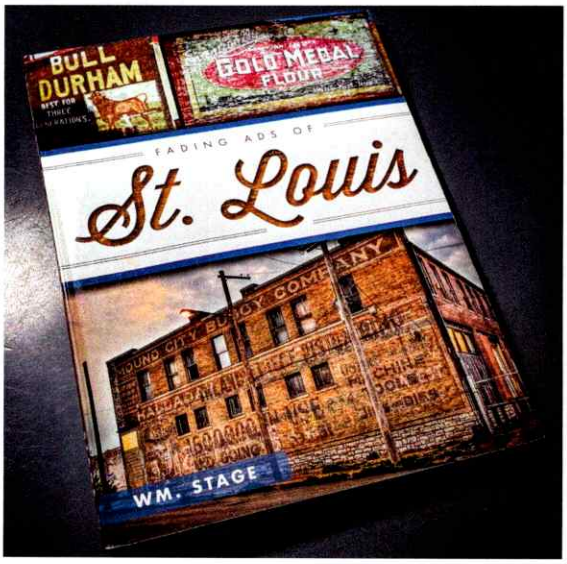


Photo 12: This is another great work on the background of Ghost Signs.

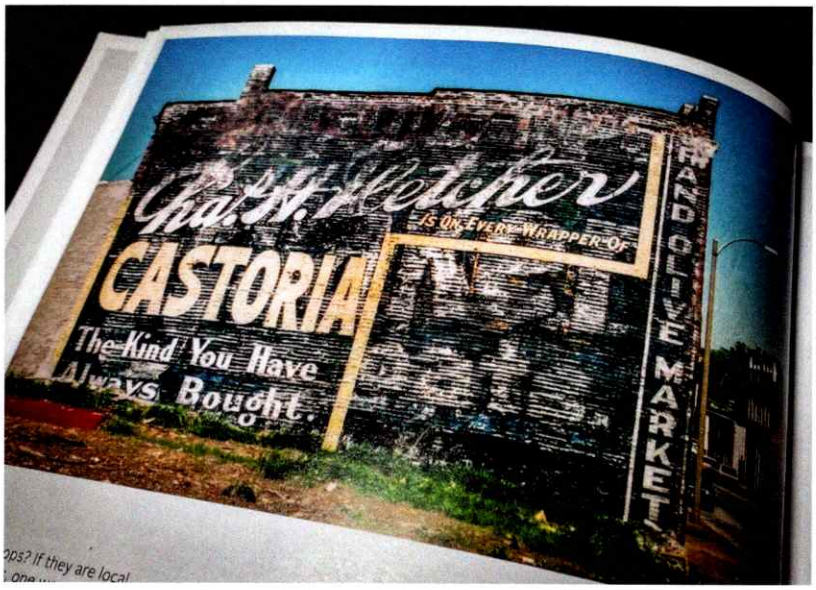


Photo 13: What a great wall this would make on an N scale building!

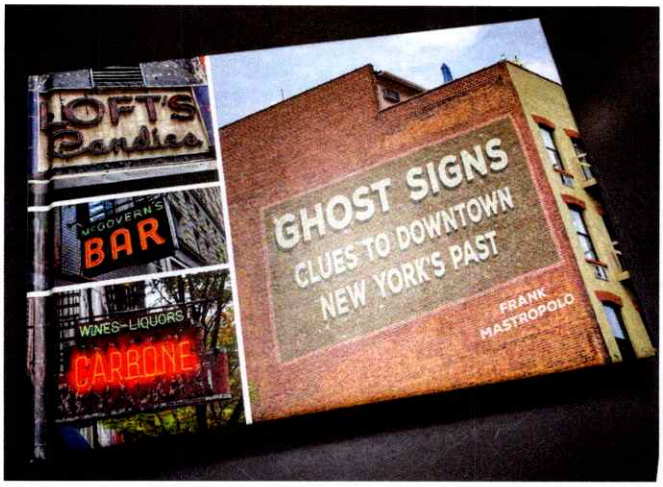


Photo 14: In Frank Mastropolo's book, he discusses ghost signs cast into the front of buildings, and those made of wood and metal as well.

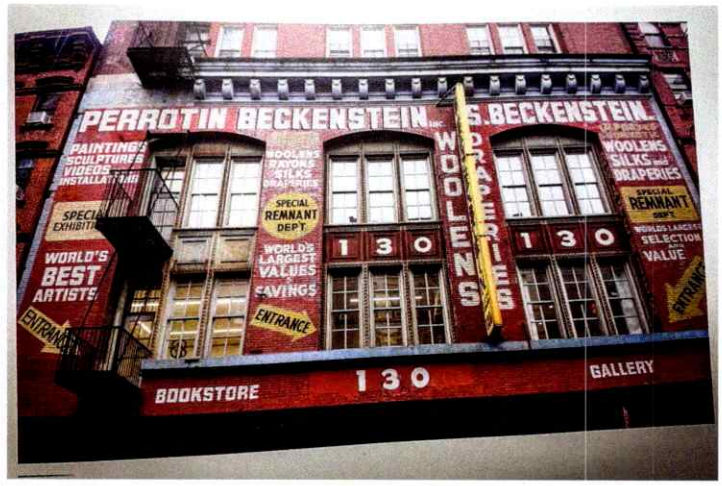


Photo 15: In 1945, Beckenstein covered the entire front of his new location on Orchard Street in New York City with promotional signage.

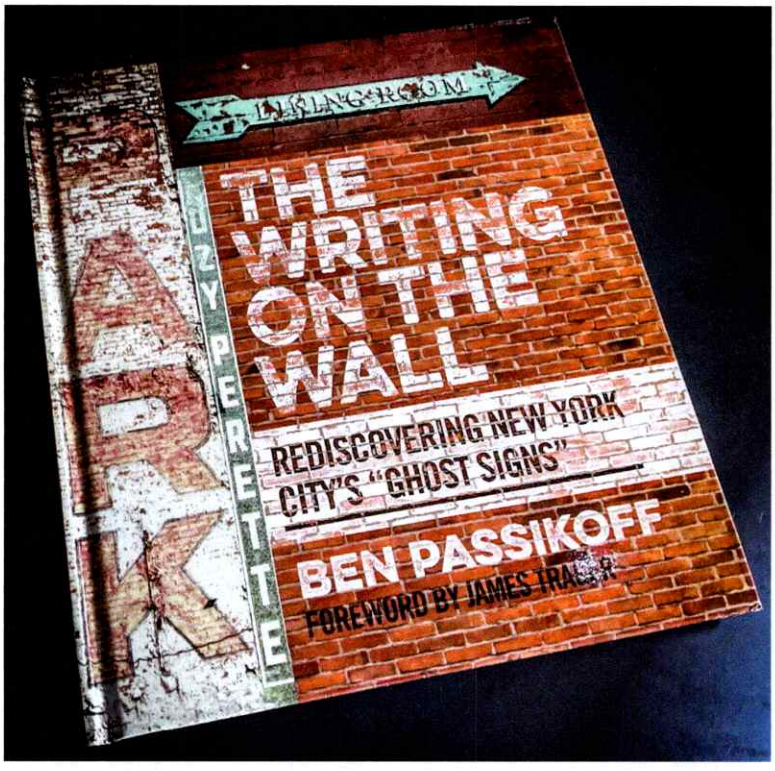


Photo 16: Yet another great reference book on the kinds of signs we can create.

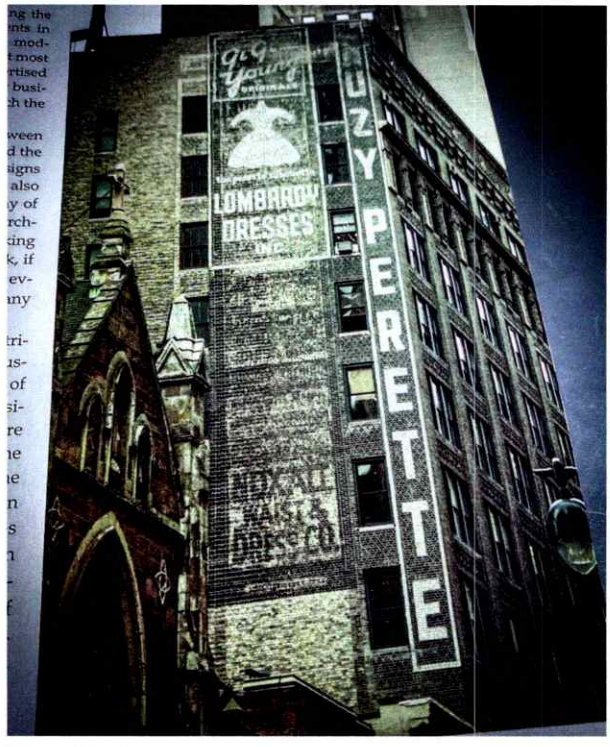


Photo 17: Sometimes signs were painted vertically to aid in reading from far down the sidewalk.

located in New York City's Upper East Side. His venerable work *The Writing on the Wall – Rediscovering New York City's Ghost Signs* (Skyhorse Publishing, New York, NY, 2017) is a rather extensive collection of signs from the obvious to the obscure (***Photo 16***). In some cases, signs are simply that of words painted vertically so as to be seen from afar while walking the sidewalks of New York (***Photo 17***).

Not all the signs we create on our models need to be sharp, clear, or perfectly legible. Many ghost signs have been so weather-beaten and faded from exposure to the elements that they are barely legible (***Photos 18 & 19***).

With the exception of the first two books that were already in my library, the rest were all mail-ordered to help facilitate the writing of this article. And wow, did they not disappoint!

But when the last, latecomer showed up, *The Smokin' Book of Cigar Box Art & Designs* (John Grossman, Fox Chapel Publishing, East Petersburg, PA, 2012), I was totally taken aback (***Photo 20***)!

While not being about Ghost Signs in particular, the featured images from the John & Carolyn Grossman Collection of cigar box labels would make excellent elements to adorn any finely built N scale structure (***Photo 21***). The more than 100 labels are over 8 inches wide and each command a full page of the book. The images are soooo big, they could even be used for G scale signage!

Searching for Out-of-Print Books

While some of the above titles are current editions and readily available, I believe others may be out of print. But that shouldn't stop us imaginative types, should it?

With the advent of online book

Photo 18: The signs we add to our models don't always have to be sharp and clear.

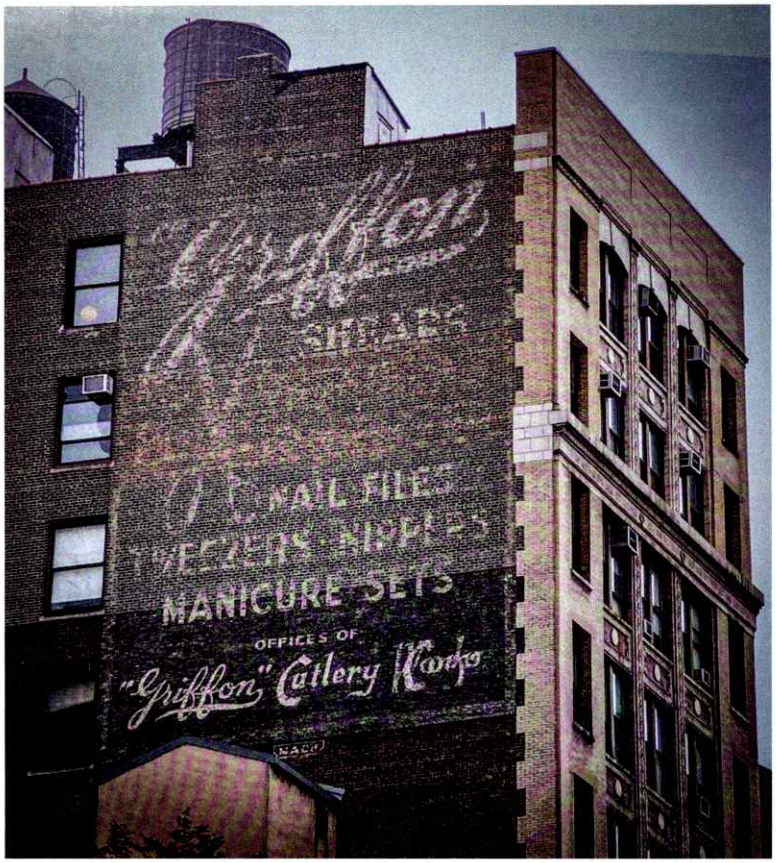


Photo 19: Another example of a very weathered sign.

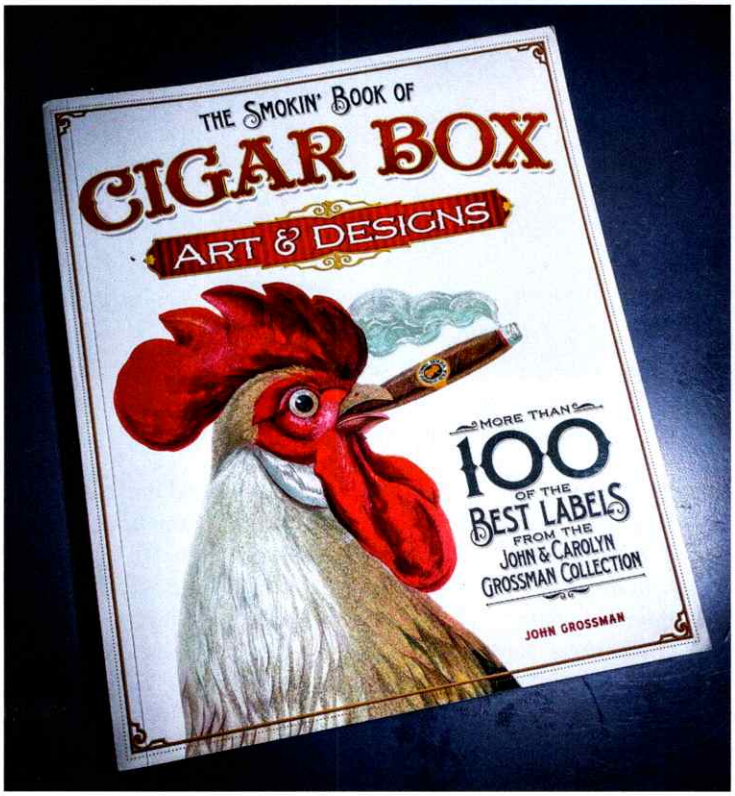


Photo 20: This book features over 100 cigar box labels.

Photo 21: Any of these labels would make great Ghost Signs.

selling, there are thousands more used books available out there in the digital marketplace than you can imagine.

And as an avid collector of all kinds of books (think railroad books), especially from certain publishers (think Morning Sun), especially on certain topics (think [Your railroad] In Color, [Your railroad] Power, [Your railroad] Facilities in Color,

[Your Railroad] Through Passenger Service in Color, Trackside around [Your City], etc.), I have become very adept in searching the used book marketplace for interested titles at very favorable prices.

I used to simply go to *Amazon.com* and do a title search, or to eBay and do the same. Amazon is probably the largest lister of used books in the world, and a lot of eBay sellers peddle estate collections they buy out.

But that isn't always the best way to find a book.

I have now learned to always go to Google first because there are a lot of other similar vendors out there.

Besides Amazon, there is *ThriftBooks.com*, *AbeBooks.com*, *Biblio.com*, as well as hobby shops and similar retailers that might have titles listed on their websites. In any case, the book you're looking for might be the least expensive at an obscure retailer you may not have known about.

Photo 22: The image area of T2's N scale decal sheets measures 3.625" × 1.875".

Photo 23: T2's products include graffiti, pre-weathered Ghost Signs, Feed & Seed, Skid Row, and Circus Sideshow subjects.

Photo 24: Dave's Decals offers a plethora of signs on all kinds in multi scales.

Check Out Internet Blogs for Even More Examples

William Stage has also, jointly with his daughter, created a blog at paint-edad.com, which is also a great source for historical reference material. The caution here is that images are less likely to be of high enough resolution (pixel count) to effect quality printing.

And Then There Are Decal Manufacturers That Offer Ready-Made Ghost Signs

All of the above examples are great sources for interesting material for our layouts. But what if you don't have the time or energy to go through the making of original decals?

In that case there are a couple decal manufacturers I have used and can

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BUSINESS PRODUCT ADVERTISING STEAM ERA - MODERN SIGNAGE HO & UP
PIN UPS GRAFFITI STREET ART HO & UP
BUSINESS BUILDING SETS HO & UP
WINDOW SILHOUETTES DOOR SETS HO & UP
TRAFFIC WARNINGS MISC BUILDING SIGNAGE HO & UP
WHITE INK ON CLEAR WATERSLIDE DECALS
POWDERS WEATHERING POWDERS - TOOLS
BARGAIN BIN MISC ERRORS, 2NDS, DISCONTINUED, ETC
BUILT MODELS AND DIORAMAS

Photo 25: Dave's website offers hundreds of decals listed under specific categories, but for all N scale signs, click on the N scale icon.

highly recommend. Initially discovered on eBay, I have come to purchase their offerings on their websites where their products are offered at better prices without the eBay surcharges.

T2 Decals (eBay username *Thorn14141*) is a manufacturer of quality waterslide decals in HO, N, and O scale. The printed image size of T2's N scale offerings measure 3.625" × 1.875" of various mixed signs (***Photo 22***), and there are plenty to choose from (***Photo 23***). While rather small, they can fit on a lot of our smaller buildings. Their products include graffiti, pre-weathered Ghost Signs, Feed & Seed, Skid Row, and Circus Sideshow subjects, however, not all are offered in N scale – but don't let that stop you! Often HO signs are more desirable for the kind of large wall graphics we are out to create.

A typical N scale decal sheet sells for $3.99, and shipping to the US is always free.

But to get the best deal of all, consider purchasing their N Scale Ghost Sign Value Pack offered at $39.35! With a value of $79.80 if purchased separately, you get a choice of 20 sets of their popular Ghost Sign decals at a savings of 40%.

You can check out their offerings at *t2decals.ecrater.com*.

Another great decal supplier that I purchase from most often is Dave's Decals, at *www.davart.net* or *www.davesdecals.com*.

Dave not only offers a whole slew of Ghost Signs, but also has business and product signs, gas, oil and automotive signs, alcohol and tobacco signs, traffic and warning signs, pin-ups and graffiti art – the list goes on and on (***Photo 24***). He even offers license plate stickers in HO! A neat thing when ordering from Dave is that you can specify your items to be waterslide decals on either clear or white backgrounds or printed on cardstock for use as freestanding signage or billboards.

Clicking on the Shop Now tab in the menu bar (do not scroll down when doing so) opens a page with all the subcategories listed (***Photo 25***). While the HO sheets are listed under individual categories as shown, all N scale sheets are found under the single N scale tab.

The image area on Dave's full size decal sheets measures 4.625" × 3.75"

Photo 26: All of the decal illustrations are overlaid with a green ½" grid, so you can know what size each particular sign is.

Photo 27: The same Pepsi-Cola artwork seen in *Photo 26* is offerred here as an HO set twice the size.

Photo 28: Here the Pepsi billboard on the half-sized N scale sheet can be compared to the same artwork offered on the full-sized HO sheet.

regardless of the scale you are ordering. On his website, each decal sheet is overlaid with a green grid of ½" spacing, so you can know exactly what size each individual sign will be (***Photo 26***). This is a full sheet of N scale signage, in which you can clearly identify four individual quadrants. You can tell from the grid that the Pepsi billboard at the top of the upper left quadrant measures just under 2" wide. But what if you think that sign is cool, but you'd like a bigger one to be used as a ghost sign? Then go to one of the appropriate tabs of the HO categories, and you will find that exact same artwork twice as big (***Photo 27***)! In fact, each quadrant of that N scale sheet is made from the same artwork that is offered on four individual HO sheets.

Because N scale is so small relative to HO, Dave offers some N scale sets that are half-sized sheets, that features the artwork of only two HO sets, as seen in ***Photo 28***. You can compare the N scale Pepsi billboard on the smaller N scale half sheet with the full-sized HO sheet.

Having an N scale decal sheet with the Doublemint Gum billboard and liking it so much, I wondered if Dave's Decals might have one in HO. And so, sure enough, I found one and placed another decal order for that sheet, along with a few other HO sheets with other billboards (***Photo 29***).

And that is exactly how I was able to discover the oversized Doublemint Gum decal I used in the Part 17 kit bash seen in ***Photo 30*** (*N-Scale Magazine*, September/October 2022).

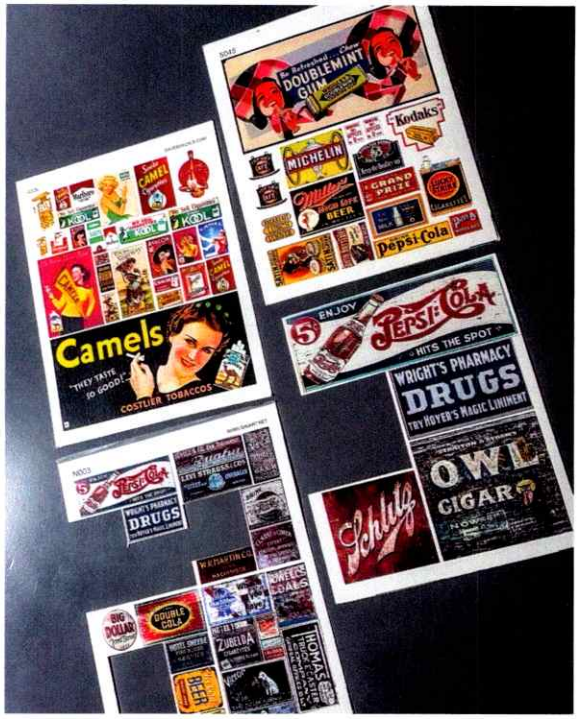

Photo 29: Here we see three HO scale decal sheets I purchased expressly for the DoubleMint Gum, Camel Cigarette and Pepsi oversized signs, lying next to an N scale sheet with the same Pepsi artwork.

Photo 30: The Reed Books kit bash featured in WOW 17, along with an HO decal sheet of the same wall graphic.

Photo 31: Here is one of my favorite sheets of specialized signs featuring seafood available from Dave's Decals.

Photo 32: Another great example of some of the store front signage available from Dave.

Photo 33: Coming next – printing your own custom signs!

Aside from all the great decals available for possible ghost signs, Dave's Decals has an enormous catalog of other great signage (***Photos 31 & 32***). He even offers decals for such things like gas stations of every flavor you can imagine, modern businesses like 7-Eleven, FedEx, The US Post Office, old-fashioned phone booths (remember those?), street & highway signs, store closing signs and more.

So I hope this installment inspires you to liven up your layouts with signs and even more signs, both old and new.

If you have any comments or suggestions about future articles you'd like to see, email me at *NScaleDen@gmail.com*.

And keep a lookout for the next installment in this series where I will cover the ins-and-outs of printing your own decal signage for Ghost Signs, custom store fronts, factory walls and more (***Photo 33***).

Until then, remember to keep your flanges between the rails.

the hobby shop pages

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bhh@houseofhobbies.com

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92683
Phone: 714-893-1015

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2490 E. Colorado Blvd.
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www.thewhistlestop.com
trainmaster@thewhistlestop.com

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www.westerndepot.com

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trftrains@cfl.rr.com
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60631 PH: 773-775-4848
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Spring Creek Model Trains
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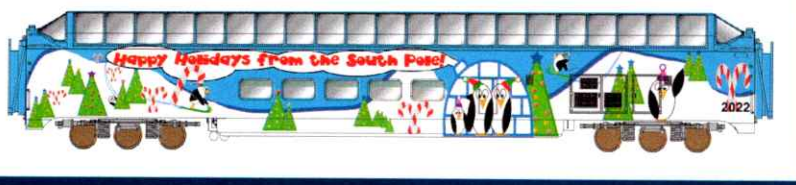

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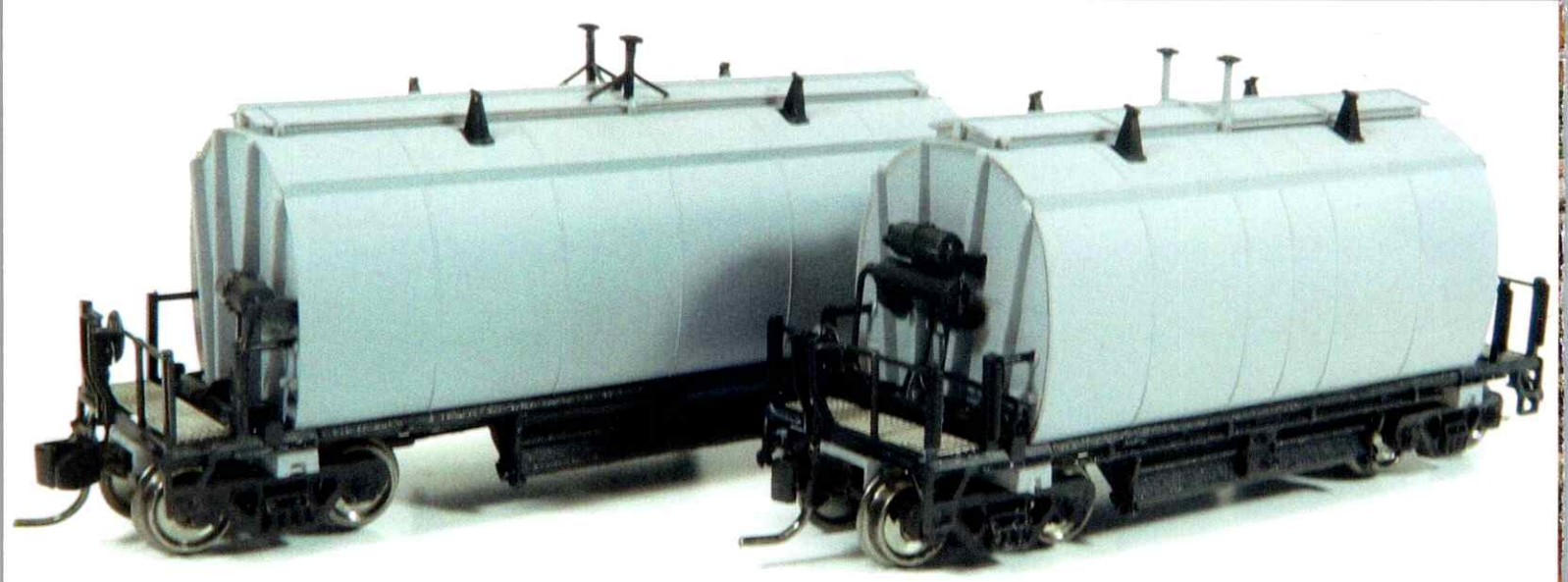

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